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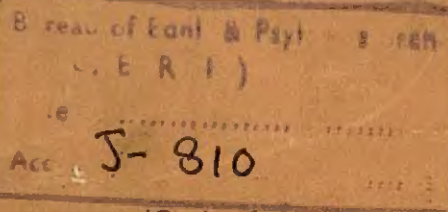
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VOLUME XIII

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Luria's Cortex Functions

Aleksandr Romanovich Luria. Translated from the Russian by Basil Haigh. Prefaces by Hans-Lukas Teuber and Karl H. Pribram

Higher Cortical Functions in Man. New York: Basic Books and Consultants Bureau, 1966. Pp. xvi + 513. \$17.50.

Reviewed by DAVID KRECH

Everyone who knows anyone knows A. R. Luria—or knows someone who knows him. Professor of Psychology at the University of Moscow, Editor of *Psychological Questions*, and a member of the Academy of Pedagogical Sciences, A. R. Luria has long been a dominant figure on the Russian psychological landscape, and quite visible from outside of Russia. About the time of the Second World War he turned his attention to the brain-injured soldier and from then on has been a constant and valued contributor to the scientific and clinical study of the higher cortical functions in man. Among his works are *Traumatic Aphasia*, *The Mentally Retarded Child*, and *Restoration of Function after Brain Injury*. In the course of his work he has had occasion to visit with two American colleagues who have shared his interests and enthusiasms. Both of these have contributed prefaces to the present volume. One is Hans-Lukas Teuber of the Psychology Department at M.I.T., and the other is Karl H. Pribram of the Departments of Psychiatry and Psychology at Stanford University. This has meant that many Americans—on the East Coast and the West Coast—have had the good fortune to meet and to get to know A. R. Luria. Perhaps more than anyone else, Pro-

fessor Luria is regarded by Americans as the representative of Soviet psychology.

The reviewer is a psychologist in one of Stanford's neighboring institutions—and thus has had an opportunity to meet and to know Luria. Like Luria, the reviewer was born in Russia; like Luria, the reviewer found his way to California; but unlike Luria, the reviewer has remained there—on, and for long periods, off—ever since 1931 when he first came to Berkeley as a graduate student. Very much a peripatetic psychologist (in too many senses, he says), the reviewer has been on the staff of the University of Chicago, Swarthmore College, Bryn Mawr College, University of Colorado (from which he was dismissed), Harvard University, University of Oslo, the University of Nijmegen, and now Berkeley; he has worked in the fields of animal behavior, learning theory, perception, social psychology, brain anatomy and behavior, and brain biochemistry and behavior. He has even written textbooks.

THE BOOK, *Higher Cortical Functions in Man*, is a most readable English translation (by Basil Haigh) from the original Russian text (of the same name) published by Moscow University Press in 1962. The publishers begin their dust-jacket blurb of this

edition by quoting from Hans-Lukas Teuber's preface—and so shall I, for I quite agree with Teuber's assessment (but since the publisher misquotes slightly, I have taken the liberty of correcting—and extending—the quotation): "... a major document in neuropsychology ... a monumental contribution. Nothing of this scope exists in the Western literature of this field ... a further and decisive step toward the eventual coalescence of neurology and psychology, a goal to which only a few laboratories in the East and West have been devoted over the last decades."

Let this last phrase of Teuber's serve as the text for my review. For this phrase contains the essence of what I consider to be this major book's major contribution. We have many papers, monographs, and books in the area of neuropsychology which display a convincing sophistication about neurology and betray a superficial once-over-slightly knowledge about psychology—and we even have a few which reverse the virtue and the fault—but rare indeed is the report of research work which shows a genuine understanding of both neurology and psychology. And that is precisely why this book of Luria's is a rare and precious thing.

When Luria considers the potentialities of the behavior of man, of his memory and his learnings, of his perceptual and of his discrimination processes, Luria takes seriously the fact that man has the brain of *homo sapiens* rather than, say, the brain of a pigeon. All of us on this side of the Atlantic know too well that this approach of Luria's would seem quaint and naive (!) to our "learning theorists." When, conversely, Luria considers the human

brain and its structure and function, he takes equally seriously the unique *human* characteristics of man's behavior and cognitive potentialities—man as a speaker of words and a conceptualizer. Luria's approach is perhaps best illustrated in his discussion of the cortical localization of speech. This is a discussion to which both the neurologist and the psychologist can repair with profit, and is, by itself, worth the investment of the time and thought required for the reading of the book. It is little wonder that Luria dedicates his book to the memory of L. S. Vigotsky.

THE avowed purpose of this book, Luria tells us, "is to analyze the disturbances of higher mental functions caused by local lesions of the brain." This purpose is never lost sight of, and Luria comes as close to achieving his purpose as any man has a right to expect. This is especially true for Parts II and III of the book: "Disturbances of the Higher Cortical Functions in the Presence of Local Brain Lesions" and "Methods of Investigating the Higher Cortical Functions in Local Brain Lesions (Syndrome Analysis)."

Unquestionably the clinician will find many new things and many true things in these sections. And many of the new things, I suspect, *are* true, and many of the true things *are* new. Indeed, it is difficult for me to see how the clinical neurologist can do without this book. Karl Pribram, in his Preface, characterizes the book as "a documentary of bedside observation and experiment in the tradition of Von Monakov and Goldstein." But over and above this, Luria's book should be read and thought about by every psychologist who thinks he would a "learning theorist" be, or every neurophysiologist who would have something to say about behavior. For these, the first two parts of the book will probably turn out to be the most valuable (Part I presents a general statement of "The Higher Mental Functions and their Organization in the Brain" with a chapter "Modern Data on the Structural Organization of the Cerebral Cortex" written by G. I. Polyakov).

A reading of Parts I and II could have tremendous prophylactic value for

psychologists. At the very least, it might abort the pitifully deformed creatures now presented as "learning theories" conceived by Carefully Selected Observations out of Disregard for Biological Structure. After reading Luria, after following his careful attempts to trace the intimate interdependence between structure and function of brain on the one hand, and organization and process of behavior on the other hand, it is difficult to understand how one could take seriously many of the proposals which currently pass for "theories of learning." For so many of these theories do solemnly propose that they can arrive at *general* descriptions and laws of learning (generalized over pigeons, rats, monkeys and man) without any regard to the controls imposed upon behavior by the nature and structure of the brain of the behaving organism!

The neuro-anatomist also has much to learn from this volume. Luria's re-examination of the conceptual basis of the notion of cortical localization of function (see especially pages 23–30), together with the application of his conceptual reformulation to the specific problem of the localization of speech (see especially pages 390–431), will inevitably engage the attention of the neuro-anatomist. It may even do more than that. It may convince him that a careful and sophisticated psychological analysis of behavior is of *absolute* importance for the understanding of the structure and function of the cortex.

THE READING of this book having raised high my level of aspiration (for Luria, that is), I would that it did not have its share of faults. Some of these are merely annoying; some are a bit more substantive. To begin with, there is the usual (Russian) excessive evoking of Pavlov's ghost and the tipping-of-the-forelock as the irrelevant and insubstantial ghost sails by. This, in a book of this stature and freshness, annoys me much. Secondly, the publishers of this book (or perhaps it was Luria) executed a good idea badly in their presentation of the bibliography. Two bibliographies are presented—one containing Russian works and one containing non-Russian

literature. This grouping loses some of its value, however, because of the failure in the text to indicate in which bibliography any given reference can be found. Of course, for many references the answer is obvious, but for some the reader could well use a hint. Thus, for example, some references to Luria—and Freud—are found in the Russian, and some in the non-Russian bibliography. Merely a gnat—all this—but annoying.

Of more significance are such matters as these: A number of times little bedside tests are described—tests which are said to indicate "suppressed" left-handedness, or this or that, but nowhere are we given any data to support the validity of these tests—not even a reference so that those of us who would, could read. Much is said about the dependence of the effect of a brain lesion upon the state of the cognitive development of the individual when the lesion occurred—but almost nothing about the relation between the premorbid *personality* of the patient and the effect of the lesion. And, finally, in discussing the physiological effects of brain lesions, almost no mention is made of possible biochemical effects which could alter behavior. Luria, in the tradition of the classical "localization" experimenters, is much too anatomically oriented. Because of this I suspect that while this book is indeed a major, a monumental contribution—it is probably the last of its kind. But this does not absolve either psychologist or neurologist from reading it. Read it you must—it will profit you greatly.

And the reading of this book can be recommended to all psychologists and neurologists with confidence that neither will find technical barriers to understanding. As has already been indicated, the English translation reads well. But much more can be said for the book as something to be *read*. It is well organized. The argument flows along with care and intelligence. Each section—and many of the chapters—has its own brief and interesting historical introduction, which helps give the reader a running start. Theoretical speculations are buttressed at many points with clinical observations. There is detail to give the book substance, but the detail is not overwhelming and does not be-

an invitation to skip the fine print. The book is replete with well-designed genuinely helpful half-tones and illustrations. There is just enough repetition. The author does not assume that the reader will remember on page 343 what was said on page 87. The book stimulates the interest and stimulation of a valuable monograph, and deserves the consideration for the reader every good book should.

This, Ladies and Gentlemen, is a good book.

For Arousal of Excitement

James Case

Sensory Mechanisms. New York: Macmillan, 1966. Pp. viii + 113. \$1.95.

Reviewed by LLOYD BEIDLER

The author, James Case, is a physiologist who has published many papers relating the sensory and neural physiology of receptor systems to the overall behavior of various animals, particularly invertebrates. He is with the Department of Biological Science, University of California at Santa Barbara.

Lloyd Beidler, the reviewer, is Professor of Biophysics at Florida State University. He and his colleagues using electrophysiological techniques have studied gustatory and olfactory receptors in many different species of animals. They have been concerned with the mechanisms of chemical stimulation as well as the dynamic properties of receptors that help determine their function. Dr. Beidler has written numerous papers directed not only to physiologists but also to psychologists, to food scientists, and to those interested in particular aspects of flavor and its importance to animal behavior.

THE BOOK *Sensory Mechanisms* is one of a number already published in the *Current Concepts in Biology*

Series. Its purpose is to give beginning students of biology and the behavioral sciences an impression of the excitement obtained in the study of senses. The author makes no attempt to achieve a balanced survey of the senses. He places major emphasis on the properties of receptors with little attention to the central nervous system or correlates of behavioral responses.

Mechano-receptors as well as receptors associated with the vertebrate muscle, hearing, chemical senses, and vision are all included. Cutaneous senses are obvious by their omission. In explaining receptor function, the most recent contributions have been incorporated. For example, the ultrastructure of the mammalian rod cell is discussed and the role of rhodopsin is nicely analyzed. The rather recent studies of Rushton using light reflected from the human retina, the possible role of the early receptor potential and the absorption measurement of single visual cones are all included in the discussion of vision. Other chapters are similarly treated with an excellent balance between recent advances and classical experiments.

THE excellence of the book is not uniform from chapter to chapter. The chapter introductory to sensory biology as well as the chapter on the chemical senses are the least well done. Psychologists may be critical of the use of the term "four primary taste modalities" rather than "qualities." Sensory physiologists may be surprised to find that taste cells have short cilia rather than microvilli. However, these small discrepancies are not major and detract very little from the highly commendable quality of the book. The author nicely blended vertebrate and invertebrate material and related their structure to function.

The book can be recommended to students taking their first course in experimental psychology and also to those psychologists who have not kept up with the recent literature in the sensory field and would like to obtain an insight into recent developments. Unfortunately, the list of further reading is not exemplary, particularly since

the author's original reason for writing the book was to excite the interest of beginning students in biology and the behavioral sciences. Any such excitement aroused will be quenched immediately if the student attempts to read many of the review articles and books written for specialized scientists whose titles appear in the reading list. Can you imagine a beginning biology student being enthralled by reading articles published in *Pharmacological Reviews* or *Biological Reviews*? I would rather guide the student toward Griffin's *Listening in the Dark*, or Roeder's *Nerve Cells and Insect Behavior*, both of which also appear in the reading list. Perhaps the author should have included two reading lists, one for additional student reading and another for those few students who may have very specific questions only answered in a book such as Bullock's and Horridge's *Structure and Function in the Nervous System of Invertebrates*.

Insights into Breadth

Stephen L. Sherwood (Ed.)

The Nature of Psychology: A Selection of Papers, Essays and Other Writings by the Late Kenneth J. W. Craik. New York: Cambridge University Press, 1966. Pp. xx + 184. \$6.00.

Reviewed by HERSCHEL W. LEIBOWITZ

The editor, Stephen L. Sherwood, graduated from the University of Vienna Medical Faculty in 1932, and studied at Anderson College of Medicine, Western Infirmary, Royal Infirmary, Glasgow, and at London University. At present he is at the Palo Alto-Stanford Hospital Center as Chief of the EEG Laboratory.

The reviewer, Herschel Leibowitz, received a 1951 PhD from Columbia University, studying experimental psychology there under C. H. Graham. He taught for some years at the University

of Wisconsin, then moved back east: Since 1962 he has been Professor of Psychology at Pennsylvania State University. During the summer of 1967 he was guest, Institute for Perception at Soesterberg, Netherlands. His *Visual Perception* was reviewed recently in CP (May 1967, 12, 242).

KENNETH CRAIK was one of the outstanding psychologists in the history of our young science whose contributions to an amazingly wide variety of topics were original, provocative, prophetic, and as the intervening years have so often demonstrated, important. There is little question that his reputation as a promising scientist had been established at the time of his untimely and tragic accidental death at the age of 31 in 1945. Similarly, there is no doubt that the potential impact of his thinking on psychology would have been even greater if he had been permitted to continue his work. The present volume attempts, by presenting a selection of his unwritten publications, to provide heretofore unavailable insights into the maturing ideas of an experimental psychologist who was equally comfortable with theoretical ideas, apparatus, philosophy, and military problems. The selections provide additional insight into the extraordinary breadth of interests of a man who was a "genius," if such a term is permitted in the psychological literature.

The present volume contains 36 articles by Craik and a reprinting of the obituary notice which Sir Frederick Bartlett wrote for the *British Journal of Psychology*. Craik's contributions are divided into six categories, the first consisting of an epilogue on his PhD thesis on visual adaptation and the second representing a partially completed text for a book on the mechanisms of learning. Section 3 is a collection of experimental papers and observations concerned primarily with visual phenomena. Part 4 deals with sensory quantification while part 5 represents a miscellaneous collection of papers on topics such as psychology for medical students, and the psychological effects of the blackout, which do not fit readily into the classification provided by the other chapters. The last

part entitled "philosophy" represents fragments of Craik's thinking on such diverse topics as war, love, language, disagreement, and life. The reader should be forewarned that the selections are not all the polished, well documented manuscripts which we normally associate with Craik. Fortunately, the editor's role was not passive as the book contains a number of footnotes which serve to fill in missing gaps in Craik's own writing as well as to relate the selected articles to the general literature.

A REVIEWER of this book is placed in a difficult position. One cannot criticize the unpublished works of a deceased colleague. Similarly, there are no grounds on which one could evaluate the selection of articles for inclusion in this volume since knowledge of the alternatives is not available. The scope of a review therefore is limited to an assessment of the book's value as a contribution to our understanding of Craik and, more importantly, of his contribution to our science.

In the preface, the editor states that "the best reward for collecting the contents of this book was the possibility of observing the birth, growth, and mutation of many of his ideas." Unfortunately, this same feeling of satisfaction is not conveyed to the reader who views only the finished product. Nevertheless, one who is familiar with Craik's work and admires his imaginative approach to a broad spectrum of problems will gain a deeper appreciation of his breadth and originality from reading this volume. The historian of psychology will undoubtedly find material of relevance in areas such as the analysis of information transmission in which Craik pioneered. For those who were not privileged to know him personally, the collection provides an opportunity to come into intellectual contact with a man whose qualities we would like to emulate.

In all probability, individuals falling in the above categories are in the minority. For the larger reading public, a more useful service would have been provided by reprinting a selection of Craik's 80 articles, many of which are out of print or inaccessible. Certainly,

for a reader not familiar with Craik the more fruitful approach would be to read the published articles before exploring the present selections. Fortunately, the present volume does not preclude future publication of such a compendium which would be as a compatible and useful supplement to the present material.

Distortions from the Past

Clyde L. Rousey and Alice E. Moriarty

Diagnostic Implications of Speech Sounds: The Reflections of Developmental Conflict and Trauma. Springfield, Ill.: Thomas, 1965. Pp. xi + 156.

Reviewed by LEE E. TRAVIS

Both authors, Clyde E. Rousey and Alice E. Moriarty, work at the Menninger Foundation, Topeka; Rousey as a speech pathologist and Moriarty as a clinical psychologist. Rousey has contributed articles to the *Journal of Personality and Mental Hygiene*, and Moriarty has co-authored with Lois Murphy.

The reviewer, Lee Edward Travis, is Dean, Graduate School of Psychology, Fuller Theological Seminary, Pasadena, California. His degrees are from the University of Iowa and from 1927 to 1938 he stayed on there. In 1938 he moved to the University of Southern California as Professor of Psychology and Speech and Director of the Speech and Hearing Clinic. In 1964 he was appointed Dean of the new Graduate School of Psychology at Fuller.

THE SINGLE undergirding assumption of this study is that from a child's speech his psychological past may be read. Without knowing the child's developmental history, Rousey postdicted

it from the child's use and misuse of speech sounds: (Rousey made all the postdictions while Moriarty made all the assessments for the accuracy of these guesses). The postdictions were remarkably accurate.

From the examination of only the speech and hearing of two dozen children a total of 233 postdictions were made. Eighty-three per cent of these guesses were exactly right according to previous psychological, psychiatric, and physical studies of these children.

The association between speech signs and past psychological behavior was often astounding. If now a child whistles on sibilants in spontaneous speech, back yonder he had generalized tension with specific castration anxiety. If now he substitutes the (f) sound for the voiceless (th) sound, back yonder he had trouble in relating to his father. If now he is hoarse and has a feminine voice quality, back yonder he found mother was more available and better able to relate to him than father. And if now he has a tongue thrust (instead of retracting the tongue as he swallows, he protrudes it) and overbite, his mother was a stronger figure than his father.

After thinking about such findings as these, one is amazed at the relatively few publications by the members of the American Speech and Hearing Association that have anything to do with personality factors in the use and misuse of speech sounds. The implication seems obvious; namely, that disorders of articulation and phonation are generally considered to be of organic and pedagogic significance. Yet others, psychologists and psychiatrists especially, give primary consideration to the possibility that ill-formed consonants and vowels are symbolically meaningful in the behavior of the speaker, that all may not be well between him and his listener.

In the present study the authors assumed a theoretical stance that vowels transmit one's drives, sexual and aggressive mainly, and that consonants qualify these drives in the defensive behavior of interpersonal relationships. Consequently, distortions of vowels would be indicative of socially distorted sexual identification and functioning and of aggression; while distortions of con-

sonants would be indicative of defensive behavior in the process of establishing relationships with others.

One other basic assumption was made, and is, to the reviewer, an important one. The listener creates what he hears as well as what he says in dealing with others. Complex personality factors are present in the auditory perceptual process as well as in the complex production of speech sounds. Thus, a child may substitute one sound for another—not only or even mainly because of

expressive difficulties, but because of an emotional bias, he does not perceive the difference between the two sounds.

The authors acknowledge several limitations of the study; a primitive statistical analysis of the data; small sample of children, and difficulty in establishing the validity of ratings. Nevertheless, they decided that the potential value of their study of the uses and misuses of speech sounds warranted immediate publication. The reviewer agrees.

Running and Pushing the Experimental Subject

Robert Rosenthal

Experimenter Effects in Behavioral Research. New York: Appleton-Century-Crofts, 1966. Pp. xiii + 464. \$7.50.

Reviewed by ELLIOT ARONSON

The author, Robert Rosenthal, received his PhD from UCLA in 1956. Since 1962 he has been Lecturer in Clinical Psychology at Harvard University. He is winner of the AAAS Sociopsychological prize for his work on experimenter effects. He is a clinical psychologist whose research is social psychological.

The reviewer, Elliot Aronson, says of himself that he is an experimental social psychologist. He received his degree from Stanford University in 1959. Since then he has taught at Harvard and at the University of Minnesota, where, for a time, he headed the Laboratory for Research in Social Relations. He is currently Professor of Psychology and Director of the Graduate Program in Social Psychology at the University of Texas in Austin. He co-edited the Handbook of Social Psychology (in press) with Gardner Lindzey and has a book coming in 1968, The Cognitive Consistency Theories: A Sourcebook,

in collaboration with several stalwart social psychologists. He has written extensively on experimental problems in social psychology.

WHEN we conduct psychological experiments we often refer to the process as "running subjects." Unfortunately, subjects occasionally get pushed as well. This is the essential message of Robert Rosenthal's book; and an important message it is. In this highly readable volume, Rosenthal describes a great many instances of experimenter and observer effects from a wide variety of sciences. These range from the famous systematic "error" of Maskelyne's assistant, Kinnebrook, while plotting the movement of the stars to the accidental cues supplied by von Osten to Clever Hans, the horse who behaved like a mathematician. But the core of his book involves a detailed analysis of Rosenthal's ingenious experiments on experimentation. These demonstrate

dramatically what experimental psychologists have "known" for a great many years—that the researcher is more than a passive subject-running machine. The experimenter-subject relationship (even when the subject is a rodent) is a truly dyadic one; accordingly, the experimenter, by his incidental behavior, can influence the subject's responses in ways that are unintended and that are not simply a function of the independent variable in its pure form. Most importantly, the experimenter's expectancy or desire regarding the behavior of the subject may unwittingly get communicated to the subject and result in a drastic change in the subject's behavior. Thus, Rosenthal has found that if an experimenter has the hypothesis (expectancy) that a particular subject will behave in a certain manner, *all other things being equal*, the subject will tend to behave in that manner.

THIS can best be illustrated by describing two of the key experimental situations that Rosenthal has devised—one involving human subjects, the other involving infra-humans. In the human experiment the subject's task was to look at a series of photographs of people and to rate each photo along a success-failure continuum—i.e., the extent to which the person pictured has been experiencing success or failure. In actuality, the photographs used in the experiment had been pretested and found to be neutral on this dimension. The independent variable in Rosenthal's experiment was the expectancy of the experimenters: half of the experimenters were fed the expectancy that their subjects would tend to rate the pictures on the "success" end of the continuum, half of the experimenters were fed the expectancy that their subjects would tend to rate the pictures on the "failure" end of the continuum. Those expecting success ratings actually got significantly higher (more successful) ratings from their subjects than those expecting failure ratings; in fact, there was no overlap between the two distributions.

In the infra-human experiments, each experimenter was assigned five rats to be run in a T-maze. Although the rats were, in fact, randomly assigned, half

of the experimenters were informed that their rats were Maze-Bright and the other half were informed that their rats were Maze-Dull. Lo and behold, the performance of the so-called Maze-Bright rats was superior to that of the so-called Maze-Dull rats.

The clarity and consistency of Rosenthal's data trumpet the fact that experimenter effects are great indeed. At the same time, one can quibble with the technique employed in most of these experiments on the grounds that it is not identical with the manner in which most experiments are conducted—and that the major difference is one that would increase experimenter effects in Rosenthal's situations. Specifically, in most experiments the investigator runs subjects in all of the experimental conditions. In virtually all of Rosenthal's studies, however, the experimenter has run only one cell; e.g., either Maze-Bright rats or Maze-Dull rats—either subjects who are expected to rate photos on the successful end of the continuum or subjects who are expected to rate photos on the failure end of the continuum. My guess is that it is easier to influence the subject unwittingly if the influence required is unidirectional rather than bidirectional. For example, in the photo-rating experiment the experimenter must do something to elicit a high success response; it is reasonable to assume that he must do something quite different to elicit a high failure response. For the sake of illustration, let us pretend for the moment that it's something as simple as emphasizing the word "success" during the recitation of the instructions. If the experimenter runs only the "success" condition, he can easily perform this behavior without awareness. But if he is running both the "success" and the "failure" conditions, it would seem to be more difficult for him to be unaware of the fact that he was systematically emphasizing one word for some subjects and another word for other subjects.

But this is a minor quibble. It is of great value for us to be shown how experimenter bias *can* intrude into our experiments. The great majority of Rosenthal's experiments accomplish this. Moreover, Rosenthal does report a few experiments where the experimenter did,

in fact, run more than one condition. The results indicate similar experimenter effects; thus, he has also succeeded in showing us how experimenter bias *does* intrude.

Rosenthal also attempts a precise delineation of *how* experimenter bias occurs. Here his success has been more limited. He has succeeded in uncovering structural and behavioral differences between experimenters who do and do not. However, he has not yet clearly shown exactly how the experimenter's expectancy gets communicated to the subject. In this domain, Rosenthal's lack of success has not been due to lack of effort. He has had observers painstakingly review films of experimenter-subject interactions. While observers are uncannily adept at guessing which experimenters will have the greatest effect on subjects, they have not as yet been able to pinpoint the manner in which the communication occurs.

THIS is an important book and should be of great value to experimental psychologists, especially those who run (and push?) human subjects. The importance of the book does not rest on whether or not Rosenthal has told us something new—thoughtful experimentalists probably have long suspected that some bias occasionally occurs in their experiments. What Rosenthal has achieved is an emphasis on the importance of this phenomenon by demonstrating empirically its existence. The dramatic nature of his data should force experimentalists to sit up, take notice, and hopefully, attempt to eliminate experimenter effects from their research. Moreover, by developing a viable set of techniques for studying the phenomenon in the laboratory, he has opened the door to the possibility of a systematic investigation of the dynamics of the influence process as it occurs during an experiment. This is of importance both in its potential for helping us to understand and eliminate bias produced by the experimenter-subject interaction as well as in focusing our attention on some of the processes involved in social influence outside of the laboratory (e.g.,

in the teacher-student relationship, the doctor-patient relationship, etc.).

Rosenthal's work has already had a direct influence on the development of techniques for reducing the possibility of experimenter effects. Some of these are suggested in the present volume; different techniques have been devised and discussed subsequently by others (see Aronson & Carlsmith, 1968). Thus, Rosenthal's book should cause experimental psychologists a great deal of concern. But there is no cause for despair; the isolation and study of unwanted experimenter effects has led to the development of techniques to eliminate these effects. These techniques can be applied to most experimental situations with only minor changes in either the design or operations.

REFERENCE

- ARONSON, E. and CARLSMITH, J. M., Experimentation in Social Psychology. In LINDZEY, G. and ARONSON, E. (Eds.), *Handbook of Social Psychology*, Revised edition. Addison-Wesley, (in press).

Meanwhile, Back at the Barnyard. . .

E. S. E. Hafez (Ed.)

The Behaviour of Domestic Animals. Baltimore, Md.: Williams & Wilkins, 1962. Pp. xiv + 619. \$14.50.

Reviewed by HELMUT E. ADLER

The author, Saad Elsayed Hafez, was born in Cairo, Egypt, in 1922. He taught at the University of Cairo from 1942-47, went to the University of Cambridge for his PhD, which he received in 1951. He was with the Worcester Foundation from 1955-56 and since then has been at Washington State University. His special area of interest is in the reproductive behavior of sheep, cattle, rabbits, and swine.

The reviewer, Helmut E. Adler, is Professor of Psychology at Yeshiva University and Research Fellow, Department of Animal Behavior, American Museum of Natural History. His 1952 PhD from Columbia was done with the late C. J. Warden. He raises dogs and has published on cats, but his main area of research is bird behavior and he has co-published *Bird Behavior*, and translated Fechner's *Elements of Psychophysics*.

PSYCHOLOGISTS interested in animal behavior have been accused of confining their attention to a few well-studied laboratory species. Zoologists seem to prefer to study animals that are rare, inaccessible or at least necessitate some travel and hardship in order to observe their behavior. Up to now domestic animals have not attracted the attention they deserve. Hafez, Professor of Animal Science at Washington State University, has assembled a group of specialists, about evenly balanced between psychologists and biologists, who provide for the first time an accurate and wide-ranging picture of the present state of knowledge of the behavior of ten of the most common domestic species.

The description of the behavior of these species would have been sufficient reason for rejoicing, since apart from the dog and the cat, there has been no comparable work available to behavioral scientists. But there is more to this book than its title implies. Only half of its chapters deal with specific domestic animals. The remainder of the work is devoted to general problems of animal behavior and constitutes a comprehensive review of the present status of this field. Contrary to many multi-authored books, the editing reveals a firm hand, so that the first two parts, dealing with the fundamentals of behavior, are well integrated with the chapters on individual species. A brief epilogue serves as a summary.

J. P. Scott sets the tone for the rest of the volume in his introductory chapter, leaning heavily on his *Animal Behavior* (1958). His classification of patterns of behavior serves as the framework for the topics under which the be-

havior of each species is discussed, although there is sufficient flexibility to avoid the appearance of having put the contributors into a strait jacket.

Domestication, according to E. B. Hale, is an evolutionary process, that results in a new peak of adaptation to the domestic habitat provided by man. It is refreshing to see domestication treated as a positive achievement, rather than as the loss of capacities and qualities that fit an animal for survival in its wild state. In the past domestication has too often been equated with degeneration and mankind itself, self-domesticated as it undoubtedly is, has not escaped this charge.

If any chapter should be singled out, it is Victor Denenberg's and Edwin Bank's chapter on "Techniques of Measurement and Evaluation" (Chapter 9). It stands by itself as a short course in behavioral methodology. It ranges from such basic topics as scales of measurement and the nature of the experimental method to recording techniques, quantification and examples of the investigation of various basic types of behavior. Ten pages in tabular form supply an overview of techniques that have been used and a thumbnail sketch of their results.

The remaining general chapters deal with genetics of behavior (Fuller), the physical environment (Schein), the social environment (Guhl), physiological mechanisms (Johnson, Goy and Michels), and behavioral pharmacology (Ross and Carr). Victor Denenberg's chapter on early experience assumes great importance in the treatment of the origins of behavior of the various kinds of domestic animals. These chapters are necessarily limited in scope, but represent much relevant information on the basic forces that shape behavior. Their level of sophistication is high and they constitute a valuable compendium of animal behavior.

The species of domestic animals covered include eight mammals (cattle, sheep and goats, swine, horses, rabbits, dogs and cats) and three species of birds (chickens, turkeys and ducks). There is an obvious, but understandable, bias in favor of the common domestic animals of Western culture. The only

serious omissions are pigeons and the domesticated insects, the bee and the silkworm.

Each chapter starts off with a few words on the wild ancestry of the present breeds. Then follows a description of the various behavior patterns. More attention is paid to ingestive and reproductive behavior than to other patterns as might be expected from the importance these aspects of behavior assume in animal husbandry. Except for the chapters on dogs (Fuller and DuBuis) and cats (Rosenblatt and Schneirla), there are few quantitative experimental data, but all chapters make fascinating reading, filled with acute observation and interpretation. Much of the material is from unpublished sources or from publications not usually accessible to psychologists. Generally, the weakest parts are those dealing with sensory capacities and perception, the strongest are those dealing with the development and patterns of sexual behavior.

This is a most valuable book. It stands as a model in the way it handles the crucial problem of heredity and experience in animal behavior. The word 'instinct' does not appear in its index, yet species differences and the origins of typical behavior patterns are treated in a thorough and sound manner. Domestic animals are familiar, yet the study of their behavior has lagged, due to the great demands of space and care that it requires. Thanks to Hafez and his collaborators we now have an overview that could be a starting point for a comparative psychology of the barnyard.



Gravity is of the very essence of impo-
posture.

—SHAFTESBURY



WHITHER CP?

Fillmore Sanford's unexpected death (5 August 1967) brought sorrow to his many associates and bewilderment to those with responsibility for the continuity of *CP*. Gardner Lindzey, the center of psychology at Texas in these days and long experienced in editorial work, will carry on as leader. Fill's wife, Ann, who has long been Fill's alter mens to intimates like me, will continue as Assistant to Gardner, pouring her loyalty into the project, with Janet Taylor Spence, the late Ken Spence's wife, as Associate Editor. *CP* needs loyalty to an idea and there you have it.

Of course, *CP* is a horror too. Books per annum increase. Psychologists increase and the divergence of their views becomes greater. Civilization is advanced by the integration of dissents, and God help us unless we can have *both* loyalty and the balm of understanding which can synthesize angry loyalties.

A dozen years ago I wrote 350 words of Comments to *CP*'s Reviewers, and Fill has just reprinted these [*CP*, August 1967, 12, 345f.] with an introduction of approval, a guess as to how many thousands of these admonitions have gone out to influence reviewers, not only in psychology, and, if his friendly hyperbole may hide the blush of modesty, a comment that the "piece" may even have influenced American book-reviewing. But then how could it? Isn't tolerance in criticism, isn't sincerity in estimating your own egoism enough to avoid gross errors in the endeavor to retain what's good? *CP* wished to offer a sanctum where an unskilled use of the adversary approach would be contemplated only with dubiety.

Comments to Reviewers does, of course, not say quite all that. It does though show how to get through. Always critical eventually, even when com-

ment is sport. All criticisms ad album. None ever ad hominem. (Oh, the reviews returned to disgruntled disappointed critics because they commented on the intelligence or integrity of the writer! But things gradually got better.) Fact, objectivity, good taste. No anonymous reviews: taste and generosity, but don't hide. It can be done, and bitterness will subside.

And if you accomplish this, where are you? You are in the home of the intellect, what I ventured recently to say was not hard science (rigid paradigms, inflexibility). Sanford asked for us too [*CP* and Hard Science, *CP*, September 1967, 12, 471f.].

Perhaps I think that enmity weakens with age and that emotional maturity is just less hot anger. But let me not offer so tough a doctrine to today's youth.

E. G. B.



If there are some subjects on which the results obtained have finally received the unanimous assent of all who have attended to the proof, and others on which mankind have not yet been equally successful; on which the most sagacious minds have occupied themselves from the earliest date, and have never succeeded in establishing any considerable body of truths, so as to be beyond denial or doubt; it is by generalizing the methods successfully followed in the former enquiries, and adapting them to the latter, that we may hope to remove this blot on the face of science.

—J. S. MILL



The Abnormal Personality

Robert W. White,
Harvard University

Covering all major disorders and psychoses, this famous book relates the disordered personality to a larger understanding of human nature. It discusses maladjustment and neurosis by giving an account of normal development and showing how it can go astray. The description of neurosis is centered around the concepts of anxiety and defense. Throughout, the book is ordered to enable the student to build consecutive knowledge; case histories are woven into the exposition and related to general concepts. The book discusses the responsibility of society in the treatment and prevention of personality disorders. Instructor's Supplement available. 3rd Ed., 1964. 619 pp. \$8.50

Social Psychology

S. Stansfeld Sargent, Clinical Psychologist, Phoenix, Arizona, and
Robert C. Williamson, Lehigh University

This introductory textbook is designed for psychology and sociology courses. The central viewpoint is the "field" approach—involving personality variables, situational factors, and persons' perceptions and interpretations of social situations. The book incorporates basic facts and principles and their application in this interdisciplinary area composed of sociology, psychology, anthropology, psychiatry, political science, and related fields. Each chapter has an annotated bibliography. An Instructor's Supplement is available. 3rd Ed., 1966. 733 pp., illus. \$8.50

Developmental Counseling

Donald H. Blocher,
University of Minnesota

This textbook presents both counseling theory and procedure in clear, simple style. It stresses the counselor's role as an agent of change, his role in such social systems as school and family, and his interest in social class differences. Psychological in approach, the book draws on the behavioral sciences. It describes human development through life stages in terms of social roles, developmental tasks, and coping behaviors. Thus the prospective counselor can understand developmental processes as they relate to clients. Models of human effectiveness show the student the upper limits of human development. 1966. 250 pp. \$6.00

Contemporary Schools of Psychology

Robert S. Woodworth, late of Columbia University; in collaboration with **Mary R. Sheehan,** Hunter College of the City University of New York

Third Edition presents an impartial survey of the essential features of contemporary schools of psychology, with sufficient detail to provide a balanced view of each school. The book incorporates recent developments in existing schools, including the work of Soviet psychologists. Building on more than a half-century of study and observation, it discusses each school, shows why and how it originated, gives its distinguishing characteristics, and explains its theories of mental processes. The book does not aim at an exhaustive criticism of the various schools nor at an evaluation of them that would lead the reader towards one or away from another. 1964. 457 pp., illus. \$6.50

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The Large and Small of Learning

John F. Hall

The Psychology of Learning. Philadelphia: Lippincott, 1966. Pp. vii+737.
\$6.95.

Reviewed by CLYDE E. NOBLE¹

The author, John F. Hall, received an Ohio State PhD from A. W. Melton and D. D. Wickens in 1949. Going on to Penn State, where he remains today, Hall rose to a professorship in 1958. Earlier he did a book on motivation (CP, 1962, 7, 219-220), and he serves as Consulting Editor for the Journal of Comparative and Physiological Psychology. He has spent the last year at the National Science Foundation.

Clyde E. Noble, the reviewer, is Professor of Psychology at the University of Georgia. After earning a 1948 master's with H. M. Johnson and a 1951 doctorate under K. W. Spence, he conducted basic research at the Human Resources Research Center for several years before returning to Academe. He has taught at Iowa, LSU, Montana, and Tulane; became a full professor in 1961; and has been at Georgia since 1964. Noble's research interests, displayed in recent volumes edited by Bilodeau and Cofer, include selective learning, verbal behavior, and psychomotor skills. Having done a review of Gagné's learning text for educators (CP, March 1966, 11, 97-98), he focuses this time on a learning book for psychologists.

EVER since we entered the decade of the '60s, when such estimable textbooks as those crafted by Bugelski (1956) and by Deese (1958) were beginning to be outflanked by the relentless march of research publications

from the learning laboratories, your reviewer has been waiting for a new intermediate *Psychology of Learning* for his upper-division and first-year graduate courses. Other academicians in this same specialty have expressed similar longings. To desire the unattainable is, I gather, a chronic condition among mathometrologists. (A *mathometrologist*, if I may introduce a neologism to replace the nontechnical title of "learning psychologist," is a behavioral scientist who specializes in observation, experimentation, measurement, and theory pertaining to phenomena occurring within the field of mathometrology [equal accents on 2nd and 4th syllables]. Referring to the quantitative science of learned behavior as practiced by the late great masters of associationism [e.g., Ebbinghaus, Thorndike, Hull, Spence] the name of this domain is derived from Gr. *manthano* [to learn] + *metron* [measure] + *logos* [field of study]. For etymological aid I am grateful to my colleague Dr. James W. Alexander, Professor and Head, Department of Classics.) We seem to want a fresh book of quality on learning every semi-decade. Now, with the appearance of John F. Hall's scholarly volume, our needs are well satisfied . . . at least for five more years. Isn't that about the half-life of a good book in the psychology of learning? (Never mind the *poor* ones.)

Professor Hall's explicit aim, as stated in his Preface (p. v.) is to provide "for the advanced undergraduate" a textbook in learning "which includes much of the material traditionally encompassed in

its study." He goes on to warn that the book's approach is going to be, by gosh, "empirical." It assuredly is, and Functionalistic too, but this is hardly surprising from a Melton-Wickens protégé. Hall explains that the rationale of his organization is to examine "those variables and/or conditions which contribute to the learning process" (a plausible-enough strategy), and states his intention to discuss "a variety of learning situations" rather than limit himself to "one or two of the traditional categories." These pietistical-sounding phrases actually come out all right in the wash. Rarely, indeed, do authors forecast so little then deliver so much. Instructors who adopt this book may be gratified by its quality, but students of the gentlemanly-C variety will surely blanch at the quantity of it. They can look forward to reading 63 pages and consulting 140 references per week in a one-quarter course. I don't know what Flesch would say about this, but the competitive Deese-Hulse (1966) package makes the modest demand of only 47 pages and 65 references per week. My students will get Hall and the second half of Andreas (1960) plus selected chapters in the books edited by Bilodeau (1966), Cofer and Musgrave (1963), Kimble (1967), and by Melton (1964).

There are 17 chapters in Hall's book. His titles are, in the main, properly indicative of content. It is a relief to encounter a case where consumers do not need Federal truth-in-packaging legislation to protect them from misrepresentation. Here's the countdown, with a few specifics in parentheses: (1) "Introduction" (e.g., definition of learning, role of S and R); (2) "The Learning Situation" (e.g., classical vs. instrumental conditioning, verbal learning, other task classifications); (3) "Measurement and Methodology" (e.g., measurement problems, learning vs. performance, acquisition curves); (4) "Motivation I: The Role of Drive"; (5) "Motivation II: The Role of Reinforcement and Punishment"; (6) "The Contribution of Motivational Variables to Learning I: The Role of Need States"; (7) "The Contribution of Motivational Variables to Learning II: The Role of Rewards"; (8) "The Role of Nonreinforced Responses in the Learning Situation"; (9) "Experimental Extinction"; (10) "The Role of Task Variables I" (e.g., meaningfulness, association value, frequency, familiarity,

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pronounceability, similarity, isolation, context); (11) "The Role of Task Variables II" (e.g., instructions, stimulus intensity and position, multiplicity of cues, distribution of work and rest); (12) "Stimulus and Response Generalization"; (13) "Theory and Controversy in Some Selected Learning Situations" (e.g., maze and discrimination-learning tasks); (14) "Transfer I: The Role of Specific and General Factors in the Transfer Situation"; (15) "Transfer II: The Role of Sensory Preconditioning, Stimulus Predifferentiation, and Familiarity"; (16) "The Nature of Retention" (e.g., measures of retention, retention curves, STM vs. LTM, overlearning, speed of learning, serial position, meaningfulness, distribution of practice, similarity of material, delay of reinforcement, warm up, organizational and storage variables); (17) "The Nature of Forgetting" (e.g., RI, PI, their designs, variables, theories).

I was glad to find that Hall's book is representatively up to date. Analysis of his 1409 references by 10-yr. intervals gives the following picture:

Decade	Number	% of Total
1956-1965	627	44.50
1946-1955	451	32.01
1936-1945	147	10.43
1926-1935	108	7.67
-1925	76	5.39
	N = 1409	$\Sigma = 100.00\%$

Less than 6% of his citations antedate 1926, whereas over 44% fall in the decade just ended. From 1930 (± 5 yr.) to 1960 (± 5 yr.) there is a 580% increase in the frequency of Hall's citations. This trend is consistent with a recent survey of mine (*Percept. mot. Skills*, 1965, 20, 959-960) that revealed both a relative and an absolute growth in the number of publications on human learning in seven American journals during the period 1940-1964. Whereas psychological articles of all types underwent a 175% gain over the 25-yr. epoch, those on human learning, memory, and transfer rose by 365%. Hall's scholarship is correctly attuned to the *Zeitgeist*. (To be scrupulously fair, so is that of Deese and Hulse; the

frequency distributions of the two books are quite similar.)

Technical errors, omissions, and infelicities of expression are not prominent in the book, but there are enough instances to catch a critic's eye: (1) In Chap. 1 the author seems to confuse "behavior potentiality" with "behavior," nor does he consistently separate *H* from *R* (a difficulty that crops up again in Chaps. 3, 7, 13, and especially 16). (2) Chapter 2 has a couple of garbled figures (Figs. 2-2 vs. 2-3) and surprisingly omits psychomotor skills from the taxonomy of learning tasks. (3) Figure 3-1 of Chap. 3 has reversed labels (*Ss* "C" and "D"); the formula for *rho* in Table 3-2 is wrong (although the solution is correct); and some *curiosa* occur in Hall's discussion of response measurement (pp. 51-56) which, taken together with his analysis of stimuli in Chap. 1, could mislead the unwary (student readers may find help in an essay of mine: cf. *Psychol. Rep.*, 1966, 18, 923-943). (4) Chapter 4, good otherwise, overlooks the dandy new ultrasonic activity-recording apparatus of Peacock and Williams (*Amer. J. Psychol.*, 1962, 75, 648-

652); fails to credit Seward and Pereboom (*Amer. J. Psychol.*, 1955, 68, 139-142) with an early comment on the role of learning in spontaneous activity; and neglects Allport's functional autonomy as well as Woodworth's mechanism \rightarrow drive sequence on pp. 96-98; another opportunity is missed in Chap. 6 (p. 173). (5) In Chap. 5 the text pertaining to Table 5-2 switches "a" and "d," but more important is that the excellent little book by Logan and Wagner (1965) on *H*-learning vs. *K*-learning was not available when Hall was writing his final section (pp. 144-148) . . . and Chap. 6, too, for that matter. (6) Chapter 6 could usefully cite in two places (pp. 154, 160) the beautiful Hillman-Hunter-Kimble (1953) data of Fig. 3-5; the concept of task "difficulty" would better have been changed to "complexity" on pp. 162-165. (7) Chapter 7's treatment of one-trial learning is inadequate; not all

Hall's conclusions on delay of *KR* are justified; and there are minor mistakes on p. 178 (line 17), p. 204 (penultimate line), and p. 224 (line 22). (8) The author errs badly in Chap. 8 when defining the Skinnerian operations for fixed and variable-interval reinforcement (p. 233); makes nothing of the inflected behavior of the 12-0 group in Weinstock's (1958) experiment; then befuddles the reader's understanding when describing the studies by Denny and Dunham (1951) and by Cantor and Spiker (1954). (9) In Chap. 9 the current status of Hull's *I_r* and *I_s* should have been elaborated (cf. *Annu. Rev. psychol.*, 1964) and the Bilodeaus (1961). (10) Chapter 10 is a mess: for some reason the concept of scaled meaningfulness (*m'*) got repeatedly purged from the text (pp. 294-296) although it survived defiantly in Table 10-2; familiarity (*f*) was next slurred into frequency (*n*) on p. 298; then the hyperbolic law relating *f* and *n* (*J. exp. Psychol.*, 1954, 47, 13-16; *ibid.*, 1960, 59, 432-433) was repressed here and later in Chap. 15; one might also argue (and I do) that more reliable data (*vis-à-vis* Fig. 10-1) on difficulty as a function of meaningfulness (*m*) in paired-associate learning have been reported (*J. exp. Psychol.*, 1957, 53, 16-22); that neither association value (*a*) nor pronounceability (*p*) fares well when placed in conflict with *m'* to predict acquisition scores in serial CVC learning (*Psychon. Sci.*, 1966, 4, 217-218); and that the same thing will surely hold for paired-associate CVC learning. (11) The worst thing about Chap. 11 is the rubbery abscissa of Fig. 11-8; the next worst things in order are: uncritical analyses (e.g., Fig. 11-22 vs. 11-23), missing data (e.g., Fig. 11-20), and the second-class role assigned to psychomotor skills. (12) Except for possibly adding graphs of neat experimental results like those of Brown, Bilodeau, and Baron (1951) and Duncan (1953), Chap. 12 is all right. (13) In Chap. 13 the author might have explained why Hull and Spence preferred different generalization gradients (p. 448); Grice's (1949) experiment should have been summarized on p. 460; the 2-factor hypothesis of absolute-and-relative stimulus learning is unnecessarily repeated (footnote 5 and p. 463); the Kuenne (1946) and Alberts-Ehrenfreund (1951) data would have clarified the transposition discussion; graphs of Spence's (1945), Ehrenfreund's (1948), and Babb's (1956) results are needed on the continuity-non-continuity issue. (14) Not only Chap. 14 (p. 503), but also Chaps. 12 (p. 435) and 15 (p. 534) would have been improved by picturing the Duncan-Underwood Star

Discriminator. (15) Chapter 15 needs a summary of Underwood's critique of Gibson's theory as presented in Cofer's (1961) book; Hall's discussion of the roles of familiarity and frequency in serial and paired-associate learning might have profited from reading my chapter in Cofer and Musgrave (1963), along with more recent experiments (e.g., *J. verb. Learn. verb. Behav.*, 1965, 4, 437-445). (16) The dilemma of comparing incomparable habit strengths and performance levels in retention studies plagues Chap. 16 so badly that equivocation is the only out (e.g., use of term "associative strength" is theoretical on p. 559, empirical on p. 562); the single term "reinforcement" is also applied to multiple operations (e.g., on p. 561 it means "making a correct response" by *S*, whereas on p. 569 it refers to the presentation by *E* of an informative and/or rewarding stimulus); I fear that Hall's uncritical acceptance of Underwood's (1964) position on degree of learning and the measurement of forgetting may have dulled his critical acumen—are we to infer that the criteria recommended for ability differences have equal relevance for *all* significant variables? (17) Satisfactory otherwise, Hall's final chapter continues to assume at least two illogical paradigms that arose in Chap. 16: (a) If a "forgetting factor" (p. 575) is present, behavioral decrement will follow; (b) the decrement in fact occurs; therefore (c) the observed decrement must be due to the aforementioned forgetting factor; the formal argument here is that of affirming the consequent, and it is a fallacy even though (c) may be empirically true. Similarly invalid syllogisms employ "lack of warm up" as the major premise, deny it in the minor premise on the basis of compensatory effects of "set-maintaining activity" (e.g., color naming), then proceed to predict no decrement; such reasoning is also fallacious for it denies the antecedent. Although Functionalism has many attractive qualities, I'd rather be a rider-of-the-muddle than a middle-of-the-roader.

THERE you have the worst I can say about Hall's book. In a second edition I would also like to see the following changes: (1) formal chapter summaries in addition to sectional recapitulation; (2) greater emphasis on psychomotor skill, selective learning, and individual differences; (3) chapter numbers printed at the top left of each page; and (4) restoration of conventional orthography (e.g., for Gagné, Klüver, and Köhler

the signs were omitted but Müller's name was printed with the umlaut). Personally, I would not want any less textual detail for Hall's summaries of experiments are generally superb, and the wealth of illustrations is simply mandatory in order to communicate effectively with student readers about the apparatus, designs, laws, and theories in this field.

Professor Hall has given us a first-rate textbook. Though it has faults they are corrigible, and its virtues are many. Sound, balanced, scholarly, readable, *The Psychology of Learning* presents the domain of mathemetry with higher fidelity than any competitor on today's market.

New Directions in an Old Text

James Deese and Stewart H. Hulse

The Psychology of Learning. 3rd Ed. New York: McGraw-Hill, 1958. Pp. viii + 514.

Reviewed by JAMES R. ISON

Both authors, James Deese and Stewart Hulse, are at The Johns Hopkins University; Deese is Professor of Psychology and Hulse is Associate Professor. Deese came to Johns Hopkins from Indiana University after receiving the PhD there in 1948. Hulse received his PhD in 1957 from Brown University. Deese is author of *Principles of Psychology*, *General Psychology* and *The Structure of Associations in Language and Thought*. Both authors have published widely in the areas of learning, language, animal learning, conditioning and reinforcement. Deese is Associate Editor of the *Journal of Experimental Psychology* and Hulse is Consulting Editor for the same journal.

The reviewer, James R. Ison, is Associate Professor, University of Roch-

ester, and Director of its Experimental Training Program. His PhD was from Michigan in 1961 and he spent a post-doctoral year with Spence at the University of Iowa. During the spring of 1967 he was visiting Associate Professor at the University of Texas where he spent the time writing and consolidating his sailing skills on the lakes surrounding Austin. His research is in areas of instrumental conditioning, discrimination learning, and reinforcement.

IN the nine years between the second and third editions of this text experiments in learning have proliferated in many and diverse directions with brand new and renewed theoretical approaches and a multitude of techniques. These streams of developments display little homogeneity other than a confluence on "what happens as a function of practice." Many of the theoretical controversies once thought to be settled are now reopened; there has been a great resurgence of interest in physiological correlates of learning; mathematical models are being expanded in ways that require commitments to particular resolutions of complex theoretical issues; the once rejected notions of organization, strategies, and attention have returned to the mainstream and are used even by Skinnerians (when operationally defined, of course); and basic laws about, say, reinforcement, which seemed firmly established 10 and 20 years ago turn out, on closer empirical scrutiny, to be complicated by previously unsuspected interactions with other variables. The task of presenting this accelerating turmoil in the undergraduate course is formidable; and it is probably impossible to give proper attention to the whole range of phenomena within the confines of a single text. The authors then necessarily have limited the scope of this edition, with the goal of providing a representative picture of contemporary work seen as central to the psychology of learning.

The analysis of basic processes is substantially strengthened over the second edition with new major sections on reinforcement principles and theory, on extinction, and on generalization and discrimination. The organization of sub-topics follows in some detail that of

the second edition. Although this provides a useful framework for discussing instrumental conditioning it does not allow a proper exposition of the increasing array of operant research nor for much detail on classical conditioning or the new empirical work on the relationships between classical and instrumental behaviors. Further, the growing interaction between physiological psychology and learning is not at all represented. This seems especially unfortunate because much of the recent work is directly relevant to the traditional problems of learning theory.

THE SECTION on human learning has been completely reorganized with an emphasis on linguistic processes, on the role of grammar and syntax in verbal materials and on the role of structure, organization, and strategies in the verbal learner. These chapters also include major sections on free recall procedures, on short term memory, and on verbal mediation. The blending of the new variables and explanatory devices with the older problems is accomplished very smoothly and there is no question that the new look in human learning is more exciting than was its predecessor. But, though there is vigor and strength in this material, the present organization is not without unfortunate consequences. The most apparent of these is that the former chapter on problem solving and thinking is now limited to concept learning "as one aspect of linguistic activity." This necessarily eliminates the fascinating studies of complex performance in infra-humans and further isolates the two sections of the text. Certainly many of the complicated phenomena in both verbal learning and human problem solving have parallels in other species, and the second edition comes much closer to demonstrating the continuity of these processes. The one area that is clearly not accorded due process is mathematical learning theory. The brief foray into the linear model is apt to leave the student both confused and bemused, and this is not likely to be dispelled by the particular supplementary reading suggested.

The book's approach is that of reporting the conclusions of a representative

set of experiments and describing the theoretical strategies relevant to that set. The book does not pretend to provide an exhaustive encyclopedic coverage of the area, nor does it attempt an original critical interpretation or integration of the phenomena. But, except for the described sampling bias, it does provide a reasoned empirical approach without unfairly promoting any particular theoretical position, and it comes very close to depicting the contemporary scene with its agitation and unsolved problems. The text flows smoothly through discussions of complex phenomena and abstract concepts without distorting the basic issues, and, with some modest exceptions, the material is presented clearly and concisely. Previous editions have gained wide acceptance in introductory courses and the present text should continue to enjoy this position.

On Rousseau, Rogers and Relationships

Joseph F. Perez

Counseling: Theory and Practice.
Reading, Mass.: Addison-Wesley,
1965. Pp. v + 186. \$4.95.

Reviewed by JOHN KINNANE

The author, Joseph Francis Perez, is Professor and Chairman of the Department of Psychology at The State College, Westfield, Massachusetts.

The reviewer, John Kinnane, is an Associate Professor in the Department of Psychology and Psychiatry at The Catholic University of America, Washington, D. C. He holds the ABEPP Diploma in Counseling Psychology, and is Director of Training in Counseling Psychology at Catholic University. He has numerous publications in the area of counseling, interpersonal relationships, and vocational development. He did his undergraduate work at the

Sorbonne and the University of Liverpool.

THE FIRST CHAPTER of this little book involves a definition of counseling and is preceded by this quotation from Carl Rogers: ". . . psychotherapy is good communication within and between men." The second chapter, "The Counselor," and the third chapter, "The Counselee," are keynoted by two quotations from the *Confessions* of Jean Jacques Rousseau. The quotations, apt but vaguely so, are these: for the counselor, "Je sens mon coeur, et je connais les hommes"; for the counselee, "Si je ne vaudrais pas mieux, au moins je suis autre." The most noteworthy thing about the *Confessions* is that they are still widely read, and that they describe the thoughts and feelings of the eccentric Jean Jacques, hiding nothing be it ever so shameful. The most noteworthy aspect of the book under review is the author's implied belief that nature is good and virtuous, and that all that is required in the therapeutic endeavour is free and untrammelled communication to offset the evils of the daily rat-race in society.

It is important to note at this point, however, that this treatise is not strictly a book, particularly if one still holds in any degree to Milton's notion that "a good book is the precious life blood of a master spirit." There are 186 pages of which five are simply blank, twelve devoted to bibliography, and approximately fifty-two consumed with verbatim transcripts of counseling interviews. Take away six more pages for the author and subject indexes, and the reader is left with 111 pages of text replete with quotations from other authors, numerical listings (of concepts, questions, and answers), and summaries.

THE expressed purpose of the author is to write a serious treatise on the theory and practice of counseling for all those, whether they be social workers, guidance counselors, psychiatrists or psychologists, who counsel people. Part I of the book is devoted to theory, and Part II presents the analysis of counseling cases in a frame of reference consistent with the theoretical develop-



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ment in Part I. It is unfortunate that the title of the book is the same as one written by Harold and Pauline Pepinsky over a decade ago (*Counseling: Theory and Practice*. The Ronald Press Company, New York, 1954). The Pepinskys challenged even the most sophisticated counselor to reassess his theory and practice. It is doubtful if the present book, although intended for the entire spectrum of practitioners, will be particularly meaningful for any but the neophytes in training. The presentation in Part I is mainly an account of the personal orientation of the author, and it is doubtful if the extensive case material in Part II contributes very much to elucidating the author's theoretical notions.

He attempts to relate the practice of counseling to the client's basic needs for protection, love, self-esteem, and self-fulfillment. In order to assist the client the counselor must be aware not only of the defenses of the client (classified as reality-distorting, rechannelizing, and reconstituting), but also his needs, perceptions, mode of interaction, and the meanings derived from that interaction.

THE APPROACH of the "renowned psychologist and counselor Rogers" is compared with that of "Wolberg, a physician and avowed psychotherapist," and the conclusion is drawn that there is no reason to distinguish counseling from psychotherapy. The definition proposed for both counseling and psychotherapy is that of an *interactive process* conjoining the *counselee*, who needs assistance, and the *counselor*, who is trained and educated to give this assistance. Desirable qualities in a counselor are those of spontaneity, warmth, tolerance, respect, and sincerity. The *trained counselor*, as distinguished from the *educated counselor*, is defined by a verbatim listing of the APA prescribed curriculum for counselors. The *educated counselor* is defined by listing the attributes of the effective counselor as described by The Committee on Professional Preparation and Standards of the American Personnel and Guidance Association. Presumably the educated counselor has been able to find deeper interpersonal meaning in his training.

The author aligns himself with the Rogerian view of counseling, and it is difficult to see that he has added to what has been said by Rogers. Perhaps one value of the book is that it reveals the struggles of one counselor to define a more problem-oriented approach for himself.

The counseling relationship is discussed in light of the concepts of structure, setting, and techniques. Transcribed excerpts from interviews are used to clarify what is meant by such concepts as affect, communication, transference, and insight. Part II is devoted to the more intensive analysis of three cases.

The author is to be commended for his attempt to present an analysis of his perception of how he thinks about counseling and how he practices it. The book may well encourage the experienced counselor to stop and take stock, even though it may not provide him with any new insights into theory and practice. The neophyte counselor will have no difficulty in understanding the non-technical presentation of concepts that are simply if superficially delineated.

For Teachers, Yes

Georgia Sachs Adams

Measurement and Evaluation in Education, Psychology, and Guidance. New York: Holt, Rinehart & Winston, 1964. Pp. xiii + 654. \$8.95.

Reviewed by JAMES C. MOORE

The author, Georgia Sachs Adams, is Professor of Education at California State College, Los Angeles. Her PhD is from the University of Southern California and she is author of *Measurement and Evaluation for the Elementary School Teacher*, *Measurement and Evaluation for the Secondary School Teacher*, *Studying Social Relationships*

in the Classroom and Tests in Social and Related Sciences.

The reviewer, James C. Moore, is Director, Testing Division and Assistant Professor of Education, The University of New Mexico. His 1966 PhD is from Arizona State University and his research interests are in the areas of test-wiseness, test anxiety, and the development of principles of self-instructional programming.

CONSIDERING that the present volume was generated from an area where there are already a respectable number of good texts, all of which have a fairly common core of subject-matter, it would be redundant to discuss its ingredients chapter by chapter. Rather, one is inclined to determine where the text as a whole falls on a poor-to-excellent scale. If the text is poor, it is quite easy to write off as a poor risk for one's fellow colleagues. On the other hand, if it falls toward the excellent end of the continuum, one is pressed to explain why. The present text definitely falls on the good side of the continuum. Perhaps in the quite good category. It is a well presented example of the substantial amount of high quality material available to teacher educators operating in the domain of measurement and evaluation. Basically, the text is directed to undergraduates majoring in education and to experienced teachers taking their first course in measurement. It appears, however, that the author has over-generalized a bit when she suggests that the text is equally applicable for training administrators, psychometrists, counselors, or school psychologists in their measurement and evaluation functions. Indeed, while these personnel should be familiar with texts like this one, it is unlikely that the material will do the job equally well for the somewhat diversified groups suggested. Predominantly then, the text is most functional for prospective or experienced teachers taking their first course in measurement, and less functional for other groups.

The volume is comprised of 17 chapters structured around four major parts labeled: Basic Principles and Procedures, The Study of Individuals, The Improvement of Instruction, and

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L. Dodge Fernald, Jr.

214 pages / 1965 / Paper / \$2.75

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L. Dodge Fernald, Jr. and Peter S. Fernald

354 pages / 1966 / Paper / \$3.75

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Second Edition

Robert S. Daniel

417 pages / 1965 / Paper / \$4.25

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Administrative, Supervisory, and Guidance Aspects of Measurement and Evaluation. The author shines her best in presenting basic measurement principles and procedures (Part I) and in suggesting measurement and evaluation techniques for improving instruction (Part III). This blue-ribbon job of tying the knot between measurement principles and classroom instruction is the most outstanding contribution of the text and is additional evidence that the book is designed primarily for those who should be most involved with measuring and improving instruction, i.e., the classroom teacher. Parts II and IV, while adequate, contribute less to the over-all substance of the material.

SINCE the volume basically presents the common core of subject matter available in the field of measurement and evaluation, its utility appears to be generated not so much by what is presented as by how it is done. Although the reviewer has not used the text in a classroom situation, he predicts that the book would make a very important person out of the instructor. This is not meant to be facetious nor to imply a lack of textual content. Rather, the organization of the book is such that an instructor would feel quite at ease in 'teaching-the-text.' Herein lies the strength of the text for classroom use. It needs an instructor to accompany it. This is a definite advantage. It allows the instructor not only to show his stuff, but assists him to keep it quite relevant to what the students have been reading and doing. This condition appears to be brought about by the highly functional use of extensive footnoting concurrent with the author's technique of presenting the material. In fact, if the footnotes were to be translated into the main body of the text, the volume would most likely be well over 800 pages in length rather than the present 654 pages. Thus, the material is quite comprehensive, almost to the degree of being a handbook rather than a textbook.

It should be noted that the text devotes no coverage to the measurement of creativity and offers very little in

how measurement techniques might be implemented in the area of programmed instruction. Although alluded to several times, the text is quite deficient in supplying any formalized instruction on the utility of modern data processing techniques available to decrease the amount of quantitative dirty-work inherent in many of the measurement concepts presented.

In summary, if one is reviewing potential texts for a course in measurement and evaluation designed predominantly for the classroom teacher, this text certainly deserves consideration and is highly recommended. It is not recommended, however, for other categories of students.

Ethnology of Development

Joseph Church (Ed.)

Three Babies: Biographies of Cognitive Development. New York: Random House, 1966. Pp. ix + 323. \$2.95.

Reviewed by ALBERTA ENGVALL SIEGEL

The editor, Joseph Church, received his PhD from Clark University and was a long-time member of the psychology faculty of Vassar College before moving, via a visiting professorship at the University of Hawaii, to the position of Professor of Psychology at Brooklyn College of the City University of New York. He is author of *Language and the Discovery of Reality* and, with Joseph Stone, of *Childhood and Adolescence*.

The reviewer, Alberta Engvall Siegel is Associate Professor of Psychology in the Department of Psychiatry, Stanford University School of Medicine. Her principal current activity, outside of teaching, is serving as Editor of *Child Development*, the quarterly journal of the Society for Research in Child De-

velopment. She is especially interested in the social psychology of childhood and adolescence, but also shares the currently widespread interest in cognitive development.

TODAY's college students have spent most of their time in the company of their coevals, since today society is stratified, to a remarkable extent, by age groups. As a result, they know a great deal about adolescents and young adults, to the despair of the teacher of adolescent development who relies on last year's observation or months the slang of two years ago. Also as a result, they know essentially nothing about infants and toddlers, to the despair of the teacher of child development who would like to build theoretical understanding upon the learner's inductive knowledge based on his informal observation.

In today's age-graded society, the student knows as little about infants as he knows about the aged, and as little about either as he knows about the Samoan or the Bantu. So the teacher of developmental psychology needs good ethnologies of development as much as the teacher of anthropology needs good ethnologies of non-Western cultures.

JOSEPH CHURCH, one of the most literate and thoughtful men working in developmental psychology today, has obtained three such documents for us. Each is a biography of a baby prepared contemporaneously by the infant's mother under Professor Church's supervision. He has edited these biographies and annotated their content about cognitive development.

For example, Debbie's mother, a physician, records that her 10-month old daughter "surprised us today by bringing 'Red Fox' on request from her room to the dining room (a distance of forty feet through several rooms—and a major feat for her to creep the distance both ways, dragging this twelve-inch-high animal with her on the return trip). We had not realized she knew its 'name' or that she could distinguish between it and 'Bear' and 'Heffalump,' but she demonstrated to us then that she knew each of these equally well by bringing them, too." The editor

then notes that "Debbie clearly demonstrates here the phenomenon of 'passive language,' the ability to understand things said to her before she herself has begun to talk. The fact of passive language indicates that language is first learned more nearly according to a Pavlovian model than an operant one" (p. 43).

Thus, this book exposes students to something close to the essential raw materials of experience with developing infants, and also gives them an exegesis which calls their attention to the labels which psychologists attach to infant behaviors and to the significance which psychologists see in them.

Two generations ago, when psychologists studied infants, they mainly mapped ages and stages and tried to determine sequences and age norms in developmental progressions. More recently, our studies, affected by Freud, saw infancy as a period of emotional development focused on nursing and other aspects of the mother-infant interaction. Today these preoccupations continue, but they are joined by a third: Piaget's view of the infant as "a youthful Galileo," as Robert White phrased it. Professor Church is at ease with all three approaches, although, as might be expected, his materials reflect our increasing preoccupation with the last.

The modest price of this paperback volume makes it a natural course supplement to be used along with any standard text. Students will enjoy learning from it. Yet perhaps they will also yearn, as I do, for some photographs of Deborah, Benjamin, and Ruth.



It is a safe rule to apply that, when a mathematical or philosophical author writes with a misty profundity, he is talking nonsense.

—A. N. WHITEHEAD



The Subnormal Area Under the Normal Curve of Intelligence

Ann M. Clarke and A. D. B. Clarke (Eds.)

Mental Deficiency: The Changing Outlook. Rev. Ed. New York: Free Press, 1966. Pp. xxi + 596. \$10.95.

Thomas E. Jordan (Ed.)

Perspectives in Mental Retardation. Carbondale, Ill.: Southern Illinois Press, 1966. Pp. xiii + 358. \$8.00.

Thomas E. Jordan

The Mentally Retarded. 2nd Ed. Columbus, Ohio: Merrill, 1966. Pp. xi + 451. \$7.50.

Irving Philips (Ed.) with the assistance of Mary Ann Esser

Prevention and Treatment of Mental Retardation. New York: Basic Books, 1966. Pp. xiv + 463. \$12.50.

Reviewed by PAUL R. DOKECKI

The editors of the first book, Ann M. Clarke and A. D. B. Clarke, are both British. Ann M. Clarke is Research Fellow, Hufield Unit, Department of Psychology, The University, Hull, England. A. D. B. Clarke is Senior Psychologist, Namor Hospital, Surrey. Thomas E. Jordan, editor of one book reviewed here and author of another, is Professor and Chairman of the Department of Guidance and Educational Psychology, College of Education, Southern Illinois University. Irving D. Philips, editor of the fourth book, is Associate Clinical Professor of Psychiatry and Director of the Mental Retardation Training Program at the University of California School of Medicine, San Francisco, and Supervising Psychiatrist, Children's Service, Langley Porter Neuropsychiatric Institute.

The reviewer, Paul R. Dokecki, received his doctoral training at George Peabody College, Tennessee, spent a

year as a fellow in the mental retardation program at Peabody and is currently a member of the faculty in the clinical psychology program at the University of Houston. He offers a year-long program in child clinical psychology to graduate students, has an emerging interest in community psychology, and conducts a seminar in that area. He also teaches experimental psychology, child psychology, and abnormal. He's a busy man.

PSYCHOLOGISTS are typically adept at drawing the Gaussian curve and precisely indicating the mean and standard deviation demarcations. The member of the family of such curves probably drawn with the most style and flourish is the distribution of intelligence test scores. The lower region of this curve is designated knowingly as representing that portion of the population termed the mentally retarded. Moreover, certain

psychologists are called on to determine with professional and scientific certainty which individuals fall into that nether region. All this has been the case for many years and at least one subspecialty of behavioral science, clinical psychology, has major roots in the study of the subnormally functioning. This caricature perhaps highlights the fact that psychology has refrained from serious study of the field of mental retardation—that is until recently.

Apart from a few scattered persons, programs, and books, mental retardation as a major concern of psychology is a phenomenon of the last 15 years. The early 1960s are especially noteworthy since they ushered in the New Frontier; John F. Kennedy was perhaps the key figure in bringing mental retardation into the public and professional spotlight. The Great Society's concern with the problems of poverty has furthered effort in behalf of the retarded since intellectual and economic subnormality are by no means orthogonal phenomena.

Recently, psychologists have progressed far beyond limited diagnostic activity to considerations of intervention and programmatic research with the mentally retarded. Research, information, and interest explosions characterize the field and the four books considered in this review give readers a glimpse of the current state of the art in this rapidly developing area.

Two of the books, the one authored by Jordan and the one edited by the Clarkes, are second editions. Those familiar with the earlier editions should be assured that the works have been substantially altered to reflect advances in knowledge and changes in emphasis within the field.

Two of the books, the ones authored and edited by Jordan, should be considered together. These volumes reflect a single and integrated point of view, primarily behavioral and social science in nature with great respect for educational and medical thinking. *The Mentally Retarded* is Jordan's attempt to introduce the student to the terminology, concepts, issues, and breadth of the field. A second purpose is to equip the

reader for an exploration of the primary literature. *Perspectives* samples this literature with curiously nonresearch and bio-medical emphases; its sections correspond to the chapter headings of its companion piece. This book of readings strives for an integrated presentation of papers through the use of interpolated commentary and introductory remarks for each section.

Jordan's volumes progress orderly through considerations of definition, the social context of mental retardation, the characteristics of retarded individuals as reflected in the research literature, developmental aspects, and avenues of intervention and amelioration. Psychologists will agree with Jordan who states in *The Mentally Retarded* ". . . that mental retardation is largely an empirical problem" (p. 112). Many will also welcome his plea for tighter scientific language and more systematic research, especially in the area of language functioning. The reviewer was disappointed, however, in the minimal treatment of environmental factors in the etiology of retardation and the almost exclusive biomedical emphasis in the chapters on development.

Jordan's objective and scientific position is dulled—or brightened depending on your point of view—by an air of 'preaching' which attempts to convince the reader that the mentally retarded deserve more attention. Research is often cited uncritically in order to make his points. In one section of *The Mentally Retarded* where public philosophy and expenditures are being discussed, Jordan reports that as late as 1950 some states spent almost twice the amount of money on residents of penal institutions than on the retarded. He concludes that ". . . the vicious were treated better than the deserving," a surprising statement for a scholarly and scientific treatise and one which is representative of a recurring trend which mars Jordan's over-all presentation.

Despite such lapses, the two volumes taken together might serve as useful text material for an introductory course in mental retardation for psychologists or educators.

The volume edited by Philips presents a series of 25 papers, many of which (although the reader does not

know precisely which ones) were presented in 1964 at a symposium sponsored by the Department of Psychiatry, the University of California School of Medicine, San Francisco. The volume takes a multidisciplinary approach to the field from a clinical viewpoint. Major topics include diagnosis, emotional factors, prevention, comprehensive care, and community aspects of mental retardation.

Apart from the brief introduction by Philips, there is no connective material for the sections. This reviewer's immediate impression was of a loosely integrated, poorly edited volume containing several excellent papers. There is a great deal of repetition across papers and in some instances authors contradict each other. It is sometimes difficult to see why certain papers appear in a given section or for that matter why they were included in the volume at all. Two papers list references at their conclusion which are not cited in the text. Another paper is over ten years old, although the reader must either deduce this from the dates of its references or dig it out of a footnote at its conclusion.

While this volume shares many of the weaknesses of edited volumes, this should not obscure the fact that several excellent papers reside between its covers (especially the one by Nancy Bayley). The frugal reader, however, may object to paying the steep price for these few gems.

ALTHOUGH *Mental Deficiency: The Changing Outlook* is an edited volume, the British scholars who contributed to the work share the same cast of mind, and the result is a surprisingly well-integrated effort. American psychologists will find this an informative, high-level book, far and away the best of the four reviewed here.

The Clarkes have succeeded admirably in pursuing their three major purposes: to present the social and behavioral science literature in mental retardation without ignoring genetic or neurophysiological aspects; to indicate the interplay of theory and practice; to examine treatment and intervention procedures. The book is a scientific and nearly comprehensive presentation of what is known

in the area today (or at least in 1965 when the edition was published). While certain recent American research efforts are not considered, the number is small.

Apart from the excellent area-specific chapters on such topics as classification, prevalence, assessment, therapy, vocational rehabilitation, speech therapy, etc., there are several chapters of general scholarly interest. Included here are sophisticated treatments of validity and reliability of measured intelligence and the literature on genetic and environmental studies of intelligence.

Scientific sophistication, critical rigor and the 'King's English' make the Clarkes's effort deserving of the attention of psychologists who would like to know more about the mentally retarded than where under the Gaussian curve of intelligence this group is located.

Praise without Insight

Charles J. Hanser

Guide to Decision: The Royal Commission. Totowa, N. J.: Bedminster Press, 1965. Pp. xiii + 274. \$6.50.

Reviewed by BARRY E. COLLINS

The author, Charles J. Hanser, is a political sociologist who received his PhD from Columbia University in 1960. In 1965 Hanser was in Europe making a comparative study of the use of Advisory Commissions in Sweden, Switzerland, France, and Germany. The results of this investigation will appear in a forthcoming book entitled *Advisory Commissions: A Comparative Study*.

The reviewer, Barry E. Collins, received his PhD from Northwestern University and taught at Yale before moving to the University of California, Los Angeles. He is co-author of *A Social Psychology of Group Processes for Decision Making* and co-author of a chapter in the forthcoming *Handbook of Social Psychology*. He is interested in the psy-

NEW AND RECENT PSYCHOLOGY TEXTS FROM PERGAMON

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psychological aspects of group decision making and is now doing research on the psychological implications of commitment to counter-attitudinal behavior.

“THE WORLD presents us with choices whose outcomes can mean survival or disintegration. What persons, then, and what processes can be most trusted to make decisions that look to the best interests of all?” *Guide to Decision* argues that the Royal Commission of Great Britain, which is “called on constantly by the world’s politically most sophisticated country,” should serve as a worthy model for other societies and governments.

Hanser vigorously pursues his support for the Royal Commission as a decision-making mechanism. He begins by detailing the case history of the Royal Commission on Police Powers of 1928 and 1960. With a brief intermission to outline the nature and function of Royal Commissions, he continues with case studies on Royal Commissions dealing with freedom and control of the press, Oxford and Cambridge, divorce, the coal industry, and the Health Service.

Since the purpose of the book is to lay bare the mechanisms and functions of the Royal Commission so that it can serve as a model or guide for others, the author details the functions of the Royal Commission and then attempts to set down the “Principles and Problems of Effective Use of the Royal Commission.”

The style of the book is journalistic and the book is full of bold value judgments and vigorous, unequivocal argument in support of the Commission’s decision-making mechanism. While the argument is often persuasive, it occasionally seems a little strained in its defense of the Commission. On page 134, for instance, the author summarizes criticism of a Commission of the Health Service which argued that compulsory arbitration would be better: “Neither party would be bound to accept the Commission’s verdict.” But, on page 136, while comparing the Royal Commission favorably to an arbitrator, the author comments, “If he [the arbitrator] tried to base his award on a set of principles balancing all other

interests he would be attempting to do exactly what the Royal Commission was set up to do.” Not so—since the findings of the Royal Commission are not binding, while the proposed compulsory arbitration would be.

ANOTHER example can be found in the arguments supporting the often repeated statement, “I know of no student of the Royal Commission, in the twentieth century, who does not regard it with the highest esteem.” Hanser argues that negative criticism of the Royal Commission is either (1) criticism of specific Commissions which is “almost invariably made by those who disagree with a Commission’s conclusions,” or (2) only “incidental comments.” It is difficult to accept the first, *ad hominem*, rejection of criticism without further documentation. For that matter, can we be sure that the praise for the Commission does not stem from satisfaction with the decisions of a particular Commission?

With respect to the second argument, the author fails to prove that all the quoted favorable comments come from “studies of the Commission itself” while unfavorable comments are only “incidental comments.” Favorable quotations come from non-specific sources such as *Concerning English Administrative Law* and *The British System*. The most frequently quoted praise—that the Commissions are a device “for bringing the best brains in the country to bear on great legislative tasks . . .”—comes from a work entitled *England*.

Whatever its merit as a descriptive case study of a political institution, readers will find little use of the more rigorous and quantitative techniques of behavioral science such as content analysis, reliability checks on coding, statistical tests, etc. One of the most frequently used quantitative analyses, for instance, is a classification of Royal Commissions of the twentieth century into expert, representative, and impartial Commissions. The criteria by which borderline cases were assigned is not specified and no reliability checks are presented.

In summary, the book presents interesting case material and a strong—

although not irrefutable—case for the Royal Commission as a decision-making mechanism. But it has little to offer the social scientist looking for insight into the specific causal mechanisms at work in the Royal Commission’s decision-making.

Empiricism Without Data

Richard M. Jones (Ed.)

Contemporary Educational Psychology: Selected Essays. New York: Harper & Row, 1967. (Harper Torchbooks) Pp. vi + 275. \$2.75.

Reviewed by ALBERT H. YEE

The editor, Richard M. Jones, received his PhD from Harvard University in 1956 and has been Professor of Psychology, Brandeis University. Currently he is at the University of California at Santa Cruz. His main interests are in applications of psychoanalytic psychology to educational practice. He is author of *An Application of Psychoanalysis to Education and Ego Synthesis in Dreams*.

The reviewer, Albert H. Yee, is now Associate Professor of Curriculum and Instruction, the University of Wisconsin. He received his EdD from Stanford University in 1965 and has taught at San Francisco State College, the University of Texas at Austin, had a post-doctoral Research Training Fellowship at the University of Oregon and has been director of two completed USOE Cooperative Research Program projects, both done at the University of Texas. His present interests are in research methodology, interpersonal relations in educational settings and curriculum development.

THE following statement introduces the reader to this paperback: "Contemporary experimental education is proceeding along two converging paths. The first had its theoretical origins in the work of Freud, was directed toward educational research by Lawrence Kubie, and is popularly known as 'education in depth.' The second had its theoretical origins in the work of Piaget, was directed toward educational research by Jerome Bruner, and is popularly known as 'the new curricula.' 'Education in depth' seeks to enliven the educative process from inside the pupil out, by means of freeing his emotions and fantasies for service in his schoolwork; 'the new curricula' seeks to enliven the educative process from outside the pupil in, by means of streamlining the challenges that are carried to the intellect by classroom exercises and materials."

Then the brief introduction proceeds with a model by Kubie, many examples of children's poems and paintings to illustrate Kubie's thinking, almost two pages on Bruner's views, and concludes with about two pages telling how Kubie and Bruner's views complement each other. One would expect different matter from the opening three words.

According to one author (Kubie, p. 72), "The implications of psychoanalytic psychiatry for education arise out of the continuous interplay between the learning process and the ubiquitous masked neurotic process." Study of the editor's past publications indicate his abiding commitment to such views and ability to support them. However, the present publication's title and content misrepresent the breadth of present-day theory and research in "experimental education." Titles may mean little, but the introduction indicates that the book is intended to portray and fix modern psycho-educational theory and research in two main emphases—the "Bruner School" and the "Kubie School."

The book contains 15 essays. Out of 12 authors, five explicitly identify their "convictions" to be taken from Freud and Kubie. Kubie himself contributes two essays. Bruner contributes two. The remaining authors write with eclectic, sometimes mystical, frames of reference. Do these essays represent

leading concerns in educational psychology today? We must say no.

None of the reprinted articles were originally published in leading journals for educational research, such as the *Journal of Educational Psychology* and *American Educational Research Journal*. None of the articles refer to empirical sources, such as in Gage's *Handbook of Research on Teaching* or the *Review of Educational Research*. No author had work reviewed in Anderson's chapter on "Educational Psychology" in the 1967 *Annual Review of Psychology*. However, Smedslund's preceding chapter in the 1964 *Annual Review* discussed work by Bruner and Gruber; it also remarked on the "impact of the Piaget-school" (p. 271), which was a common assessment in the early 60's. Therefore, there is partial, if not belated, basis for this book's thesis. However, the "psychoanalytic psychiatry for education" point of view receives no reference in either review.

The readings not only fail to typify today's major concerns in educational research, they are also depressingly uneven in scholarly merit. Bruner's two articles are outstanding, and several others may interest readers unfamiliar with the "Kubie School" of thought. However, most articles deserve no distinction as exemplary scientific work. For example, the basic term, experiment, is seriously misused, such as "An Experiment in Higher Education" and "An Experiment in Elementary Education." In the last essay, the author relates 16 excerpts from a "classroom log" covering her activities as a teacher of a second grade class. On the first day: "Today something exciting happened. The children were all sitting at their desks waiting for me to tell them what the next activity would be when suddenly it came to me, in a playful-serious way, 'What about asking them if they would like to tell their dreams? . . .'" (p. 233).

"The last day: . . . I told them that that kind of projector never breaks like the movie projector; they had just stopped looking at the pictures. They seemed to like the idea that their dream projectors were broken and were full of arguments. Diane suggested that we close our eyes to see if I was right.

The children were so excited that real quiet couldn't be achieved but most rested their heads and closed their eyes while I instructed them to feel tired and let their heads get heavy. Shortly there were cries that the pictures were coming or that they were not coming. By now it was arithmetic time and we had to stop" (p. 253).

Lofty in Aim, Big in Body

Deobold B. Van Dalen and William J. Meyer

Understanding Educational Research: An Introduction. Rev. Ed. New York: McGraw-Hill, 1966. Pp. x + 523. \$7.95.

Reviewed by BEEMAN N. PHILLIPS

The first author, Deobold B. Van Dalen, is Professor of Education, University of California, Berkeley. His collaborator, William J. Meyer, is Professor of Psychology and Education, Syracuse University. They also collaborated on the earlier version of this book.

The reviewer, Beeman N. Phillips, is Associate Professor of Educational Psychology and Director of the School Psychology Program in the College of Education at the University of Texas. He received his EdD from Indiana University in 1954. His areas of special academic interests include child development, school psychology and psycho-educational research. His major research interest at present involves a continuation of the research indicated by his *USOE Final Report, An Analysis of Causes of Anxiety among Children in School* (1966).

EDUCATIONAL research is an amorphous, fenceless discipline that interests academicians and professionals of many persuasions and backgrounds.

It has, also, a subject matter ranging from academic freedom to vocational education. And, in such an intellectual forest, what particular types of trees does one single out if he is writing a text book on educational research? Does one choose to devote his attention to the forms of educational research? To its substance? To both its form and its substance?

Typically, in textbooks on educational research, form is emphasized, and substance (plus form) is treated in specialized volumes (e.g., *Handbook of Research on Teaching*, 1963), and in books on specific topics (e.g., Thorndike, *The Concepts of Over- and Under-Achievement*, 1963). But even with this delimitation, the task is still enormous, for educational research encompasses almost all forms of research extant. One must, therefore, be selective, or write a compendious textbook, which is what *Understanding Educational Research* is. It is, in this sense, representative of the genre of texts in the Good, Barr, and Scates tradition (*The Methodology of Educational Research*, 1936).

If we use the Preface as the source of information on what the authors sought to do, we note that this 1966 edition is described as a "comprehensive revision" of the 1962 edition. Reading the two editions side by side, and chapter by chapter, the reviewer questions the appropriateness of this description. If one means by *comprehensive* that a "broad," "wide," "extensive," and "full" revision occurred, it is the reviewer's judgment that only Chapter 11, "Strategy of Experimental Research," qualifies, although there are a few additions and deletions of content in other chapters, and some rephrasing and rewording occur in all chapters. In addition, about 25 per cent of the references cited in the 1966 edition do not appear in the 1962 edition.

The book is further described as being appropriate for mature undergraduates and beginning or unsophisticated graduate students. Yet, in just two chapters (written by W. Meyer) the essentials of an introductory course in statistics are presented. Although it is suggested that parts of the book might not be useful to all instructors, the reviewer is unable to think of many

situations where these chapters would be preferred to a good introduction to statistics book. Juxtaposed with the authors' reference to the burden of the formidable "foreign" language of research, and the difficulties it causes many students, one might have expected fewer statistical concepts, and a more detailed and thorough discussion of them. This criticism is pertinent to other chapters as well, especially Chapters 10 and 12.

Two further objectives of this book, as stated in the Preface, are "to imbue students with a respect for the scientific spirit of inquiry," and "to acquaint them with problem-solving techniques that will prove useful in their academic, personal, and professional lives." These are lofty aims, and if the authors had succeeded in these aspirations, they would have written an extraordinary book which would emerge as a hallmark of the field. In the reviewer's opinion, it is the "body" of the scientific enterprise, rather than its "spirit," which emerges in the pages of this book.

FOCUSING, now, on the content of specific chapters, the reviewer was disappointed that Chapter 1, "Research and Social Progress," didn't include more discussion of the sociology of knowledge, the scientific versus humanistic view of culture, and the increasingly visible conflict of interests between researchers and advocates of the right to privacy. In Chapter 3, "General Concepts Concerning the Scientific Method," complicated issues (e.g., determinism) are sometimes not given the attention needed for comprehension. In Chapter 4, "Nature of Observation," the lack of utilization of psychological research and theory in the discussion of perception and other concepts is surprising. Chapters 5 and 6 are among the best discussions of the use of library resources available, and these chapters, or similar materials elsewhere, should be required reading for all beginning educational researchers. Chapter 8, "The Solution of the Problem," is improved over the 1962 edition, primarily because of better handling of the concept of *hypothesis*. Chapter 10, "Strategy of Descriptive Research," discusses important concepts too briefly, or in too

restricted a sense, including the study and correlational methods. Also, there is no mention of the use of overlapping longitudinal and cross-sectional samples to offset some of the disadvantages of both approaches. Chapter 11 is the best chapter in the book, but a more complete discussion of the psychology of experimenter bias would be welcomed by many readers. Chapter 12, "Tools of Research," amounts to little more than an enumeration of tools available. Finally, it should be noted that no systematic and integrated use is made of the examples given in Appendices B-I.

In summary, this reviewer cannot highly recommend this book as a text for beginning educational research students. He would use Chapters 5 and 6, Chapter 9 on "Strategy of Historical Research," and Chapter 11; but for the topics covered in other chapters he would turn to other resources. And, yet, this is still one of the better introductions to educational research; and the reviewer would actually prefer it over some of its competitors (e.g., Borg, 1963; Good, 1966). Perhaps educational research is too broad in scope and encompasses concepts and ideas from too many disciplines to be effectively put together within the covers of a single book which is reasonable in length. The reviewer is of the opinion, however, that the difficulty lies more in the failure to distinguish the essential from the nonessential aspects of the research process, and in the failure to take more seriously what Bruner and others have been saying about the process of education (in the generic sense).



An abstract term is like a box with a false bottom: You may put in what ideas you please, and take them out again without being observed.

—ALEXIS DE TOCQUEVILLE





PSYCH NOTES from SAUNDERS

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LEWIS PETRINOVICH received his Ph.D. from the University of California at Berkeley in 1962. In 1957 he was an Associate in Psychology at the University of California at Berkeley. He was an instructor and Assistant Professor of Psychology at San Francisco State College, 1957-1963. He then joined the faculty at the State University of New York at Stony Brook as Associate Professor, becoming Professor of Psychology in 1966.

ROBERT D. SINGER received his Ph.D. from the University of Pennsylvania in 1960. After receiving his doctorate Dr. Singer went to Stanford University as Assistant Professor of Psychology. He left Stanford in 1963 to organize the Division of Psychological Services at the new State University of New York at Stony Brook and to serve as Associate Professor of Psychology. Since 1964 Dr. Singer has been Associate Professor of Graduate Psychology at New York University.

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By **HARRY KAUFMANN**, Professor of Psychology, Hunter College of the City University of N. Y. About 192 pages, paper bound, About \$2.25. Ready February, 1968.

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We Shall Overcome

Group for the Advancement of Psychiatry

Psychiatry and Public Affairs: Reports and Symposia of the Group for the Advancement of Psychiatry. Chicago: Aldine, 1966. Pp. xi + 465. \$8.95.

Reviewed by GEORGE W. ALBEE

The Group for the Advancement of Psychiatry was organized in 1946. It defines itself as a loose federation of investigating committees ordinarily composed exclusively of psychiatrists. There are presently 21 such committees. GAP members themselves serve without pay; they work by correspondence, or by specially organized symposia, and often with expert consultants. Although the separate Reports are usually the work of a particular committee, all GAP members are asked to read and comment on a final Report and "these comments and suggestions are acted upon before the final report is approved." It is not clear whether one dissension can hold up publication, or whether a majority vote carries the day.

The reviewer, George Albee, is past-president of the Division of Clinical Psychology and a member of the APA Board of Directors. He has been at Case Western Reserve since 1954 with time out to be Director of the Task Force on Manpower of the Joint Commission on Mental Illness and Health from 1957-59, and for a sabbatical year in Rome in 1960-61. He formerly was Assistant Executive Secretary of APA. He is a fervent advocate of a policy of disengagement of clinical training in psychology from the psychiatric setting and from reliance on the illness model. He is also a fervent fisherman and horticulturist, with specialization in begonias.

THE Group for the Advancement of Psychiatry (known to the initiated as GAP) was described in *Action for*

Mental Health as a group of "Young Turks" who organized after World War II, determined to change public attitudes toward psychiatry, to draw public attention to the horrors called state mental hospitals, and to engage in active recruitment efforts to bring able young people into training in the field.

Many of the names of GAP members in the present volume will be long familiar to psychologists. The Young Turks have turned into Vintage Turks. Somewhere along the Anatolian trail they have acquired wisdom, or wise advisors, about school desegregation, nuclear war, working abroad, brainwashing, and international relations.

GAP is liberal, well-meaning, and socially conscious. It is as different from the Texas Medical Association as the ADA is from the Birchers. But is this enough?

GAP members assure us they are our friends. Unlike members of the Nassau County Psychiatric Society they call us Doctor, and they often ask us to draft their reports, to collect data for their committees, to clean their statistics, and even to come to their cocktail parties. They take pains to assure us we are all equal in the social sciences. They now offer their leadership in a number of complex areas. They make me nervous.

THE present volume begins with a reprint of a 1949 discussion of the social responsibilities of psychiatry. There are many statements here which a psychologist with a short fuse may find explosive.

For example, a footnote on the first page would leave all but the most sophisticated readers with the impression that psychiatry played a major role in the 1954 desegregation decision of the United States Supreme Court. Further, "This precedent . . . places on psychiatrists (among other social [sic] scientists) some of the obligation of clarifying and interpreting the psychological aspects of social issues."

Frequent reference is made throughout to "psychiatrists and other social scientists," and to psychiatry as "the applied science of communication."

In this world of social science the psychiatrist must abandon (but only weekends) the position that mental disorder is illness. In this company it is necessary to adopt "a more elastic view of illness as a qualitative and quantitative deviation from the hypothetical norm of bio-social adaptation . . . [Previously] the biological and social components of causation were dissociated, whereas in the present concept these elements represent partial facets of a continuous unified process."

Where does psychiatry acquire expertness in social science, on such topics as segregation and international relations? Very simple. "The specific competence of the psychiatrist is derived from his knowledge of individual motivations. Since groups are composed of individuals, this special knowledge can contribute to the understanding of group relations." (And as international relations are group relations we come full circle back to Howth Castle and Environs.) Also we are informed in another footnote of a further source of their special knowledge—most of the members of the Committee "have treated both Negro and white patients in both the North and South by psychoanalysis and psychotherapy."

THE VOLUME reprints the 1957 GAP Report on *Psychiatric Aspects of School Desegregation*. It was the work of a committee of psychiatrists who invited certain consultants to be Full Participants with them. This latter group, the reader is told, includes Dr. Stuart Cook, Dr. Marie Jahoda, and Dr. Fritz Redl. They also consulted with Dr. Gordon

Hamilton and Dr. Robert Johnson. (powerful lot of doctors!) The content of his particular report is badly dated, because of all that has happened since 1947. It is a little like reading a journalistic thought-piece about the Korean War. But there are some stimulating comments:

"In our view psychiatry concerns itself with the study of all [sic] human behavior, not merely with the study and treatment of the maladjusted."

Also: "From a psychiatric point of view, the prejudiced attitudes of this group of segregationists [the Red-necks] reflect emotional disorder, for which the most appropriate remedy would be psychotherapy." ("Time's up, George; Lie down, Lurleen!")

Part II deals with Psychiatry and International Relations. There are invited papers by a number of social scientists, some excellent, on cross-cultural and trans-national communication, and on psychological problems of working abroad.

Part III is concerned loosely with forceful indoctrination. Speeches and a round-table include discussions of isolation experiments, of the Minnesota studies on semi-starvation now 20 years old, and a long and heterogeneous section on brain-washing including much tabular presentation of data.

Part IV is concerned with The Threat of Nuclear War. It includes some lengthy and some excellent speeches by physical and social scientists. The bulk of this Section is a 1964 report (of the GAP Committee on Social Issues) entitled Psychiatric Aspects of the Prevention of Nuclear War. It is the tightest and best organized section of the book. Still, the international situation has changed so rapidly that parts are already out of date and no longer really relevant to current crises.

OVER-ALL the volume is a mixed bag, without a unifying theme or sequence. The reports, speeches, round-tables, and committee reports were written at different times stretching back more than two decades. There are parts that are informative, stimulating, and interesting. But there is also much material no

longer applicable to a rapidly changed national and world situation.

Throughout there is a bothersome lack of humility in the face of these awesome problems. Innumerable official pronouncements of the American Psychiatric Association have made it clear that because of the alleged biological causes of "mental illness," and because of the unique preparation of the physician for assuming "medical responsibility for the total care of the patient," psychiatry must be in charge of all individual treatment endeavors. By a similar kind of logic it would seem reasonable to ask psychiatry to adopt an ancillary, parasociological role in the social and political matters herein considered. Study of social science and political theory and method ordinarily is not an important part of the undergraduate or the subsequent educational preparation of most psychiatrists. But the present volume leaps this GAP with a kind of bland self-assurance. Psychologists will not be the only social scientists who find pretentious statements such as the following: "We [sic] do not yet have reliable methods for scientific validation of the laws of human behavior. While endeavoring to improve such methods, we must, for the present, rely largely on empirical data derived from the direct observation of personality function in the fields of psychiatry and psychotherapy."

Now, all together . . . Deep in my heart, I do believe . . .



There is not so good an understanding between any two, but the exposure by the one of a serious fault in the other will produce a misunderstanding in proportion to its heinousness.

—THOREAU



Psychoanalytic Sociology

Seymour Rubenfeld

Family of Outcasts: A New Theory of Delinquency. New York: Free Press, 1965. Pp. xxii + 328. \$7.95.

Reviewed by EDWIN I. MEGARGEE

The author, Seymour Rubenfeld, received his 1954 PhD in psychology from The Pennsylvania State University, and was Chief of Psychological Services at the National Training School, Washington, D. C. until 1957. He is now Consultant on Youth and Delinquency, NIMH, is clinical psychologist in the Fairfax County, Virginia, Guidance Center, and is in private practice.

The reviewer, Edwin I. Megargee, received his PhD from the University of California, Berkeley, and is now Associate Professor at Florida State University. He has been clinical psychologist, Alameda Co. (California) Probation Department, consultant to the Camp Gary Job Corps Center, and Assistant Professor at the University of Texas. He is currently co-authoring with sociologist Carl Rosenquist a book reporting results of a cross-cultural study of Anglo, Mexican-American and Mexican delinquents.

EVER since Maskelyne fired Kinnebrook, it has been apparent that one discipline's subject matter is another's error variance. While sociologists concentrate on the study of social forces, psychologists are more prone to look at individual differences in behavior. By and large each group is content to let the other pursue its trivial investigations while they themselves get the important work done. In the investigation of juvenile delinquency, a social phenomenon consisting of adolescents' individual differences with the standards of society, the two disciplines come into conflict. Sociologists are bemused at the efforts of psychologists attempting to explain the behavior of

an individual adolescent by reconstructing in painstaking detail the probable history of his weaning or toilet training, while apparently ignoring such obviously more important variables as his race, religion or class (although never his sex). Psychologists, on the other hand, are bewildered by sociologists' apparent ignorance of the importance of unconscious needs and point out that such sociological variables as social class can not be crucial since some lower class individuals become delinquent and others do not. As a result, both groups are bothered.

Rubinfeld's book will bother them more as he attempts to reconcile sociological and psychological viewpoints by blending them into a new theory of delinquency. He discusses the inadequacies of several contemporary sociological theories in detail. He also points out the inadequacies of orthodox, psychoanalytic theory, albeit in less detail, but finds little to criticize in the revised formulations of Hartman, Kris and Lowenstein and of Erikson.

Rubinfeld then goes on to state in a series of eight propositions how social factors, such as cultural blocking of an individual's opportunities, will influence the personalities of adult individuals in a subculture and, through them, the personalities of their children. He further states how some of these personality patterns, interacting with the social milieu, will constitute a "pressure toward deviance." Frequent references to cross-cultural findings avoid the culture-boundedness too common in delinquency theories.

These propositions are illustrated in a series of "paradigms" explaining how pressures toward deviance may arise and be expressed in four strata of society ranging from lower-lower to upper-middle class. These paradigms are discussed in historical perspective with speculations as to possible origins in Freudian Feudal family functioning. Rubinfeld resists the temptation to explain all the manifold possible variations; this results in greater comprehensibility, but at the expense of an appearance of dogmatic inevitability.

The book concludes with a telling chapter documenting the implications of this viewpoint for programs in delin-

quency prevention and control such as those proposed by the Kennedy and Johnson administrations. In this chapter he makes painfully obvious the inadequacy of programs that aim at changing the ecology and not the personality, or the individual and not his milieu.

UNFORTUNATELY, many readers may not read this far. Sociologists may be repelled by the emphasis on the deficiencies of sociological theory combined with Rubinfeld's relatively uncritical attitude toward modern psychoanalytic theory, which he asserts, "... is the richest source of scientific understanding regarding personality functioning, and the most widely accepted, that we have at present, in spite of criticisms regarding its construction." While the propositions Rubinfeld finally states would be acceptable to many psychologists and sociologists who are not analytically oriented, the latter are likely to find tedious, if not annoying, Rubinfeld's detailed speculations about fixations, regressions, cathexes and various resolutions of the Oedipal conflict.

Even more telling are problems of form. Rubinfeld's prose, particularly in the beginning of the book, is often murky. Occasionally a tangential point will be made and illustrated by an example, which in turn is illustrated by yet another example and so on until the reader has forgotten what is being illustrated. The reader may react to this overly discursive style as did a graduate student who remarked, "I kind of like what he's saying, but he gets so involved and confused I am not sure he understands what he is doing." Those who persevere will find that the style improves somewhat after the first three chapters, with tighter organization and more frequent summaries helping one find one's way.

Another failing, in this reviewer's eyes, is a lack of empirical data to buttress crucial points. The amount of documentation varies from chapter to chapter; however, even in the best documented chapters the reader who prefers primary quantitative data to anecdotes or references to conclusions reached by authorities will be disappointed. When

Rubinfeld does cite an empirical study, he does so without providing the procedural details that would allow one to decide on its relevance or adequacy. On the two occasions when this reviewer attempted to look up some of the more interesting source material, bibliographical deficiencies made it difficult to locate the references in question.

It is unfortunate that stylistic problems should detract so from the effectiveness of this book. Few readers will have Rubinfeld's familiarity with both sociological and psychoanalytic concepts. Therefore clarity of expression assumes even greater importance than it would in a book addressed only to specialists in a single discipline. It is doubly unfortunate since Rubinfeld has addressed himself to an important problem on which he has some valuable ideas to contribute.

Psychoanalysis Still Lives

Harold F. Searles with a preface by
Robert P. Knight

*Collected Papers on Schizophrenia
and Related Subjects.* New York:
International Universities Press,
1965. Pp 797. \$12.50.

Reviewed by DAVID H. LIPSHER

The author, Harold F. Searles, is Supervising and Training Analyst, Washington Psychoanalytic Institute and holds consulting and teaching positions at Sheppard and Enoch Pratt Hospital, NIMH, Georgetown and Columbia Universities. He holds a Harvard MD and is a widely read and respected authority on the psychotherapy of chronic schizophrenics. He is author of *The Non-human Environment in Normal Development* and in *Schizophrenia*.

The reviewer, David H. Lipsher, was educated at Yale and Stanford and has for some years been engaged in self-

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Psychological Testing, Third Edition

by Anne Anastasi, Fordham University

"A beautifully written book—lucid in its explanations, flowing and smooth in the style of writing, and systematic in organization and treatment." —*Psychometrics* (on the Second Edition)

Systematically organized, this text presents information that will enable the student to evaluate psychological tests of any type, and to interpret the results correctly. Included here are current testing problems and developments *too new* to be in any other book.

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By Anne Anastasi

This widely acclaimed text provides an excellent introduction to major concepts pertaining to individual and group differences in behavior. Differential psychology is treated as one approach to the understanding of behavior. Specific attention is focused on the effects of early experience upon subsequent behavior, long-range studies of population changes, longitudinal follow-ups of children and adults, intellectual functioning in maturity and old age, and age difficulties in personality traits. Multiple-choice Items are available gratis.

1958, 644 pages, \$8.50

Principles of Behavioral Analysis

By J. R. Millenson, York University, Toronto

This rigorous and systematic text is designed for use in first courses in psychology in which major concepts of functional behavioral analysis are built from the ground up. A unique feature of the book is its use of the *R* and *S* notation system as a kind of conceptualization and recording method. Elementary statistical concepts are developed within the framework of the data presented. Over 400 tables, line drawings, and diagrams are contained.

1967, 488 pages, \$7.95

Write to the Faculty Service Desk for examination copies.

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styled eclectic clinical practice and in teaching at various universities in Dallas; along the way he received an ABEPP diploma. Much of his work is with private hospitalized patients, many bearing schizophrenic diagnoses. He is Director of the Department of Psychology, Timberlawn Psychiatric Center, Dallas, Texas.

DESPITE reports of its imminent demise, psychoanalytic theory continues to provide the modal model for practicing psychotherapists. Further, the psychoanalyst's reign as the High Priest of the mental health world remains intact, amidst rumblings of revolution from 'radicals' whose notions are less widely accepted or whose services less handsomely compensated.

In this volume, twenty-four of Dr. Searles's previously published papers provide a developmental account of the issues closest to his concern during more than fourteen years of intensive psychotherapy with chronic, remarkably regressed, heretofore unsuccessfully treated schizophrenics. These run the gamut from notions on affects as defense mechanisms to game-playing in the therapeutic hour. Throughout the volume one finds embellishments on principles that have come to be associated with Washington neoanalysis, e.g., Sullivan's stress on interpersonal processes, Fromm-Reichmann's emphasis on positive forces in human nature. As the author puts it, "My whole conceptual structure rests upon a conviction that the most powerful driving force in human beings, including schizophrenic patients and their mothers, is nothing so negative as an effort to avoid anxiety, but rather is the effort to express himself or herself in a loving, constructive way." A most timely orientation in this day of love-ins and related public phenomena.

Briefly, the etiology of schizophrenia is laid to the failure of mother and infant to achieve a 'normal' symbiotic relationship and/or its subsequent resolution. Successful treatment of the schizophrenic necessitates—you guessed it—just such a development in the circumscribed fifty-minute hour that patient and therapist share four or five

days each week. Accepting the theory for the nonce, one might conjecture that so fruitful a symbiosis would be inordinately enhanced were therapist and patient to spend more prolonged periods of their life together. Indeed, it has been suggested that hospital personnel involved in the patient's day-to-day living have a greater therapeutic influence upon him than the high-priced spread offered by the annointed 'healer.'

ADDRESSING oneself to the 'effectiveness' of the psychoanalytic approach to the treatment of schizophrenics might well constitute an attack upon a straw man. But the ultimate criterion for judging a therapist's work must be his patients' responses and not the elaborateness of his theory. Without further comment, here are Dr. Searles's statistics: 14 years devoted largely to 18 patients, seen from 40 to 2,650 hours each (average 900); according to the author's own appraisal, 13 remarkably improved (though 7 still hospitalized), 1 considerably improved, 2 slightly improved, 1 unchanged, 1 suicide.

Whatever one might think of the psychoanalytic model for treating chronic schizophrenics or of the clinical approach to scientific investigation, practicing clinicians are in debt to Dr. Searles for his poignant vignettes, candidly and comprehensibly illustrating his theoretical hypotheses. There will always be precious few psychotherapists willing or able to dissolve ego boundaries along with their delapidated patients, even if a truly profound personal experience is their mutual reward. But who can resist associations to his own clinical experiences upon reading of the ambivalent schizophrenic who nominates her therapist for "The Congressional Medal of Spit"? For 'seconds,' there is the patient responding to his therapist's unrecognized affect in announcing "with forced 'friendliness' and 'politeness,' 'Well, the time's up for today.' 'Go to hell, you son of a bitch!'"

THERE are, to be sure, insights to be found in these papers that can be most readily and profitably applied in psy-

chotherapy as it is commonly practiced, regardless of the therapist's avowed orientation or the patient's diagnostic and residential status. But perhaps the reader comes most to appreciate the man who plays the therapist in these scenes. Dr. Searles has relatively few qualms about revealing himself as he develops his concepts in the course of a parallel experience in personal analysis. His emphasis is always on the *therapist's* feeling-response as it clarifies, stymies, or promotes therapeutic movement. His candor is truly remarkable:

"I recall that I fantasied now . . . on innumerable occasions during . . . highly productive hours together, that I was giving suck to her from my breast. This was a highly pleasurable experience free from either anxiety or guilt. . . . In the first of my two dreams, Martha and I were stroking one another in a free and sexually exciting way. In the second dream I was preparing to have intercourse with my infant daughter. . . ."

These papers are not meant to make peace among psychoanalysts and their burgeoning body of critics. Too many clinicians' blood will boil, for instance, when they find the suggestion that urgency in obtaining therapeutic results is an iatrogenic hindrance. As Dr. Searles's perspective widens over the years, however, his thinking becomes increasingly in tune with concurrent non-analytical trends in the psychotherapy field, notably social learning theory and existentialism. Should the reader react strenuously to a given point, the author always has the last word: perhaps this feeling warrants analytic investigation.



The ideal itself has its roots in natural conditions; it emerges when the imagination idealizes existence by laying hold of the possibilities offered to thought and action.

—JOHN DEWEY



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CHILDHOOD AND ADOLESCENCE

A Psychology of the Growing Person

by L. JOSEPH STONE, *Vassar College* and JOSEPH CHURCH, *Brooklyn College*

Random House, January 1968, 640 pages; \$7.50

A revision and substantial expansion of the leading introductory text on child psychology. This comprehensive survey of human psychological development since birth is based on experimental study, observation, and close interaction with children and adults. Incorporating advances in the exploration of psychological development and techniques for studying children, the new edition also features more specific studies of research methodology, as well as a new chapter on developmental principles which brings together previously scattered material. A revised INSTRUCTOR'S MANUAL will provide a variety of test questions, suggestions for child study films, and other teaching aids.

ELEMENTS OF PSYCHOLOGY

by DAVID KRECH and RICHARD S. CRUTCHFIELD, *both of the University of California, Berkeley*

Knopf; 785 pages; Illustrated; \$7.00

This distinguished introductory text focuses attention on relevant research. Its readable yet comprehensive style maintains student interest.

THE DYNAMICS OF BEHAVIOR DEVELOPMENT An Epigenetic View

by ZING-YANG KUO

Random House, 1967; 256 pages; \$2.50 paperbound

" . . . It is my intention to make this book a revision of the most radical Watsonian behaviorism, so-called, by bringing it up to date and eliminating its early short-comings."—from the author's Preface.

EXPERIMENTAL STUDIES OF DREAMING

Edited by HERMAN A. WITKIN and HELEN B. LEWIS, *both of Downstate Medical Center, State University of New York*

Random House, 1967; 224 pages; \$2.95 paperbound

A firsthand view of recent findings in dream research discussing their psychological and psycho-analytic implications.

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SIX PSYCHOLOGICAL STUDIES

by JEAN PIAGET

Introduction, notes and glossary by DAVID ELKIND, *University of Rochester*

Translated by ANITA TENZER

Random House, February 1968; 192 pages; \$4.95

These six essays, never before available in English, present a concise summary of Piaget's ideas. Although this translation is clear enough to be used as an introduction to Piaget, it retains the essence of his challenging insights.



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Psychoanalytic Biography

Franz Alexander, Samuel Einstein and Martin Grotjahn (Eds.)

Psychoanalytic Pioneers: A History of Psychoanalysis as Seen Through the Lives and the Works of its Most Eminent Teachers. New York: Basic Books, 1966. Pp. xvii + 616. \$15.00.

Reviewed by JOSEPH ADELSON

The late Franz Alexander was Director of the Department of Psychiatry at Mt. Sinai Hospital, Los Angeles, and Clinical Professor of Psychiatry at the University of Southern California. In addition to his frequent contributions to professional journals he was author or editor of numerous major works. Samuel Einstein, MD, is Associate Clinical Professor of Psychiatry at the University of Southern California; Training Analyst, Southern California Psychoanalytic Institute; and Attending Psychiatrist, Los Angeles County Hospital and Cedars-Sinai Hospitals, Los Angeles. Martin Grotjahn, MD, is Clinical Professor of Psychiatry at UCLA and Training Analyst, Southern California Psychoanalytic Institute.

Joseph Adelson is Professor of Psychology and Assistant Director of the Psychological Clinic at the University of Michigan. He received his PhD from the University of California at Berkeley, has taught at Michigan State College and at Bennington. He is co-author of the recent *The Adolescent Experience*, and is currently working on the topic of political socialization.

THIS BOOK grew out of an attractive idea: to assemble biographical accounts of Freud's followers and students. The idea is attractive on several grounds. These were men of unusual imagination and courage. For many of them, the commitment to psychoanalysis, in those early and perilous years, meant forsaking a secure career in this or that Establishment of the time. We know

surprisingly little about them, and much of what we know comes from Ernest Jones's biography of Freud, which—whatever its merits—is notoriously jealous and inaccurate in its treatment of them. As the editors suggest, this is a good moment to get on the record reports of their lives, for we are near enough in time to them for first-hand impressions to be available, yet remote enough to view them dispassionately.

We have, then, biographies of forty-one persons, ranging alphabetically from Abraham to Zulliger, and chronologically from Jelliffe and Groddeck (both born in 1866) to Kate Friedlander (born 1903). All of the first generation of Freud's followers are included, even those, such as Jung, Adler, and Rank, who later separated from the movement. Though the book concentrates on the early psychoanalysts, more recent figures are also included—Hartmann, Kris, Anna Freud, Erikson, Rado, *et al.* The book also contains two final chapters which chronicle the often Byzantine history of psychoanalytic politics in England and the United States.

How we judge this book depends on what we demand of it. For the casual reader it will probably be satisfactory enough. He can browse through it, pausing here and there for information or edification. If he finds a chapter dull—and many of them are—so be it; he can leaf through the book to find a more interesting one. But if the reader applies more stringent standards—if he looks to it for purposes of reference, or as a contribution to intellectual history

—then he will find this book inadequate in vital ways.

What has gone wrong? One problem seems to be an uncertainty—or, perhaps, hazardness—of editorial will. It is hard to discern the aims of the book, what audience it seeks, what role it is meant to play. The preface is uninformative, and on those matters which require editorial purpose—selection of subjects, allotment of space, assignment of biographers—one cannot recognize a clarity of intention. We get the impression that the book has been gathered rather than edited.

CONSIDER, for example, the choice of subjects. We are not told what criteria were used, nor is there an evident logic of choice. Some distinctly secondary figures are included, and some extremely important ones omitted. Nor is there any apparent connection between the amplitude of a career and the number of pages given to describing it. There are inexplicable anomalies in the distribution of space: why does the chapter on Ernest Jones require fifty-four pages to fewer than five for Anna Freud? By far the most questionable editorial decisions have to do with the selection of biographers. More than half of them are drawn from the ranks of Southern California psychoanalysts, as are the editors, and most have had only a marginal connection, or none at all, with their subjects. Inevitably these chapters have the circumspect and sometimes sodden quality of "assignments," diligently performed to be sure, but lacking both the *brío* and the sureness of touch we are more likely to find in chapters written by those who have had a personal relationship with their subjects. No doubt the editors could not get the biographer of choice in some cases; but it is hard to imagine—to cite only one example among many—that they could not find, among Melanie Klein's many colleagues and students, one who would write a first-hand account of her career and personality. Strangely enough, in the one area where an emotional distance from the topic would be desirable—in the surveys of British and American psychoanalysis—the editors have chosen authors who are, to put it mildly, over-

involved. I have always admired Edward Glover's forensic talents, and it is entertaining to watch him savage his former colleagues in the British Psychoanalytic Society; he should have some arena to do so, but is this book the place? The choice of John Millet for the history of American psychoanalysis is even more unfortunate, for he has all of Glover's tendentiousness but none of his enchant wit; and much of his essay, written in a curious mixture of competence and contentiousness, is used to try off old scores.

As to the biographies themselves, on the whole the most interesting are memoirs in spirit; in these the author concentrates on the personality of his subject, utilizing his own experiences to draw the portrait. The memoir is a difficult genre, but those few who try it do it well. In one case it is done superbly, in Ralph Greenson's account of Otto Fenichel. Greenson evokes Fenichel with extraordinary vividness: more than that he evokes an era: that period just before the Second War, when psychoanalysis was not yet fashionable, when it was a lonelier, less affluent, more scholarly discipline than it has since become. Greenson's art is that he does not merely tell us this, he *shows* it through a masterful use of the telling anecdote. What he and several others—Weiss on Federn, Lantos on Friedlander—do so well, most of the authors cannot do at all. They seem uneasy in representing character, largely because they cannot find the proper affective posture towards their subjects: how to be admiring without being fatuous, how to be dispassionate without being aloof. Many of the writers are paralyzed by the polarities, and settle for an obituary prose: the tone solemn, the rhetoric epideictic.

Most of the chapters stress the career and writings of their subjects, and a number of these are excellent. There is a candid and beautifully balanced appraisal of Theodore Reik by Joseph Natterson; a scholarly account by Isidore Ziferstein of the neglected Paul Schilder; a forthright portrayal of Geza Roheim by Weston La Barre. The ticklish problems of Adler and Jung have

been given to Sheldon Selesnick, who writes of them lucidly and equitably. A remarkably thorough account of Ernst Kris's career is offered by Samuel and Lucille Ritvo; Mrs. Ritvo has been trained in history, and it shows. But these and a few others aside, the biographies in this book reflect a conscientious but losing struggle against limitations—insufficient knowledge of the lives of the subjects, or an inability to capture the feel of their milieu, or an uncertain sense of what is and is not historically pertinent. In many cases we are given little more than a few facts about the subject's life, and a precis of his writings.

It would be too severe to say that this book is a failure; yet it is not a success, despite the energy of its editors and the earnestness of its authors. It is ambitious beyond its means; it is a venture in the writing of intellectual history, yet it underestimates what that craft demands in depth and breadth of scholarship.

Drugs Affect Behavior, and Vice Versa

Hannah Steinberg, A. V. S. de Reuck and Julie Knight (Eds.)

Animal Behaviour and Drug Action. (CIBA Foundation Symposium) Boston: Little, Brown, 1964. Pp. xiv + 491. \$13.00.

Reviewed by ARTHUR S. SCHWARTZ

The first of the three editors, Hannah Steinberg, a PhD in the Department of Pharmacology, University College, London, served as Secretary of the Organizing Committee of the Ciba Symposium and has published several papers on psychopharmacology. Mr. A. V. S. de Reuck and Julie Knight are,

respectively, deputy director and editorial assistant of the Ciba Foundation.

The reviewer, Arthur S. Schwartz, is Chief, Laboratory of Physiological Psychology, Barrow Neurological Institute, St. Joseph's Hospital, Phoenix, Arizona. He received his PhD in 1957 from the University of Buffalo. For the past three years he has also been teaching a course in Behavioral Pharmacology at Arizona State University, and has embarked on a Mission to Publishers, preaching the need for a comprehensive textbook on psychopharmacology. He is too cowardly to do it himself, he says.

JUDGING from the sheer weight of words and the increasing interest in psychopharmacology, we seem to be witnessing the development of a viable growth industry. The field has tremendous attraction for all classes—those interested in the manipulation and control of behavior, as well as those concerned primarily with the underlying physiology. Not the least of the interested parties are the pharmaceutical houses, whose business it is to supply the others with new and useful agents. In this category one can specify an almost infinite variety of hypothetical drugs, each with a specific mode of action designed to test a particular hypothesis by changing a given behavioral measurement, enzymatic reaction, or neuronal activity. Obviously the potential for the pharmaceutical industry is considerable, but turning the coin reveals a multitude of problems, technical and conceptual, which face not only the pharmacists but the concerned scientists and practitioners as well.

THE group of pharmacologists, psychologists, physiologists, biochemists and psychiatrists participating in this symposium attempt to delineate these problems, and offer their experiences in coping with them. Although the central theme is ostensibly the role and limitation of animal studies in the investigation of centrally acting drugs, the methodological restrictions permeating many aspects of psychopharmacology is consistently brought into focus. H. Stein-

Eugenics Quarterly

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PERIODICAL ABSTRACTS

GENETICS, *Gordon Allen*

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single copy \$2.00 plus postage

berg showed that in rats, even a single, brief exposure to a Y-maze markedly altered the effects of a mixture of amylobarbitone and amphetamine on exploratory behavior in subsequent tests. Reports by others offer sobering reminders that subtle variables such as social groupings, nutritional states, heredity, performance baselines, and past experience exert powerful influences in the effects of specific drugs, and that discrepancies between the data from different laboratories may be examined in terms of differences in these variables. Route of administration and age receive their share of attention. In two separate papers W. G. Dewhurst and W. S. Feldberg provide support for the notion that the *direct* effect of catecholamines on the mid-brain is depression. Intravenous injection of catecholamines in adults produced behavioral and electrocortical arousal. However, bypassing the peripheral sensory organs with intraventricular injections, or administration of these substances to young chickens which lack efficient blood-brain barriers, resulted in behavioral and electrocortical sleep.

Much space is devoted to the problems of screening and evaluating drugs, and to those of legitimate extrapolation (or interpolation?) from effects in animals to effects in man. Most of the material is in the form of unscripted discussion, and ranges from the importance of the characteristics of neural membranes to the adequacy of normal humans as test objects in clinical studies. The approach of the participants to the search for new drugs is equally divergent: Is it necessary to formulate theoretical models of behavior in order to know what to look for, or is it more fruitful to rely on serendipity and look for something else?

Balance against the imposing list of difficulties discussed herein are some experimentally-derived data (e.g., N. E. Miller, L. Cook, M. E. Jarvick, L. Stein, P. B. Bradley, J. Bureš and L. Weiskrantz). The actions of the important tranquilizers, sympathomimetic amines, and cholinergic and anticholinergic substances are presented, but the emphasis is primarily on their use as tools in illustrating the conceptual problems of the psychopharmacologist.

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Winter

SUPPLEMENTARY QUESTIONS to accompany INTRODUCTION TO PSYCHOLOGY.

By CLIFFORD T. MORGAN and RICHARD A. KING, University of North Carolina.

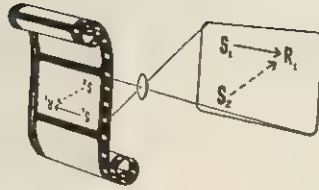
This is the second group of questions to accompany *INTRODUCTION TO PSYCHOLOGY*, Third Edition. In this new group are 45 questions per chapter—20 multiple-choice and 25 true-false questions per chapter. The multiple-choice questions have been printed on 3 x 5 cards for easier handling and are particularly suitable for examinations and quizzes. Each group of true-false questions covers similar content and is introduced by a brief statement.

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Reinforcement Therapy: An Antidote for Therapeutic Pessimism

O. I. Lovaas, Technical Director

Reinforcement Therapy. Distributed by Smith, Kline & French Laboratories, 1500 Spring Garden St., Philadelphia, Pa., 1966. 16 mm, sound, black and white, 50 minutes. Sale (to hospitals only), \$50; rental, no charge.

Reviewed by ALBERT BANDURA

Ivar Lovaas, technical director of the film reviewed here, received his PhD from the University of Washington in 1954 and is now Associate Professor at UCLA. Albert Bandura says, "Dr. Lovaas is best known for his development of reinforcement approaches to the modification of autistic behavior. He also received a great deal of unwelcome notoriety on the basis of Life Magazine's shock treatment of his project under the title 'Screams, Slaps and Love.'" During production of this film he was assisted by an advisory committee consisting of Teodoro Ayllon, Behavior Research Laboratory, Anna State Hospital, Anna, Illinois; Sidney Bijou, Psychology Department, University of Illinois; Jay S. Birnbrauer, Psychology Department, University of North Carolina; Halmuth H. Schaefer, Research Psychologist, Patton State Hospital; and James Q. Simmons III, MD, The Neuropsychiatric Institute, Los Angeles.

Albert Bandura, the reviewer, received his PhD in 1952 from the State University of Iowa and is now Professor of Psychology at Stanford.

Among his research interests are social learning and behavior modification. He says that at present he is completing the third revision of the yet unpublished *Principles of Behavioral Modification*.

I RECALL from my clinical past the recommendation of a renowned child psychoanalyst that, in the course of professional training, every psychotherapist should have the experience of treating an autistic child. This experience was primarily intended not to test or to enhance one's therapeutic effectiveness, but rather to instill a proper sense of humbleness and to extinguish any lingering feelings of psychotherapeutic omnipotence. On the basis of results of the behavioral approaches depicted in the film, *Reinforcement Therapy*, this reviewer would similarly recommend that all psychotherapists be provided with an opportunity to work with refractory cases, not as a chastening extinction exercise, but to infuse an appropriate degree of therapeutic optimism.

The film presents unrehearsed treatment sequences from three demonstration projects designed to produce bene-

ficial changes in autistic children, mental retardates, and adult psychotics through systematic application of reinforcement procedures.

The opening and major portion of the film illustrates the techniques developed by Ivar Lovaas at the University of California Neuropsychiatric Institute to establish language functions in autistic children. Four profoundly disturbed children, who had proved unresponsive to traditional forms of therapy, were selected for this project. They displayed virtually no social responsiveness and during most of the time they engaged in bizarre, repetitious bodily movements. Two of the children are mute, while the other two are entirely echolalic.

In teaching these children communicative speech a modeling-reinforcement procedure is employed in which the therapist displays progressively more complex forms of verbal behavior and the children are reinforced for increasingly closer reproductions of the modeled responses. By this method the children are first taught phonetic sounds, and then in a stepwise fashion more complicated combinations of words. After the children have advanced to the point where they can learn new words imitatively with ease, they are taught a labeling vocabulary by having the therapist present objects accompanied by corresponding verbal prompts which are gradually withdrawn. Syntactic rules and abstract concepts are later established by rewarding children's appropriate responses to events that are modeled either verbally or behaviorally. In the case of echolalic children, inappropriate matching responses are extinguished through reinforcement withdrawal, but otherwise the training program is similar to that employed with mute cases. The final stage of the program involves training in spontaneous and conversational use of language, by having the therapists carry on rudimentary conversations with the children.

As treatment progresses, the formal training procedures are incorporated into more natural interpersonal interactions in which verbal approval, affectional demonstrativeness, and play activities replace food as the major reinforcing

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HENRY SLUCKI, University of Southern California

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events. These interaction sequences vividly portray the children's struggles at learning and the infinite patience, warmth, and dedication of the treatment staff. Even allowing for some illusory gains resulting from skillful film editing, the evident changes in the children's behavior are quite impressive. A mute boy who had displayed tantrums vigorously fought off the affectionate attention of adults but later discussed, in a friendly, informed, and interested manner, the portable breathing apparatus for free-swimming divers. The fact that such beneficial outcomes are achieved with nurses and college students serving in the role of therapists further adds to the social significance of this treatment approach.

Some of the preliminary procedures employed in this project (e.g., shock avoidance methods to establish social approach behavior), which have subsequently been abandoned, were justifiably criticized on ethical grounds. In the present film therapists make only limited use of negative interventions, usually in the form of addressing the child sharply in order to terminate bizarre or self-stimulatory behavior. That such procedures, if thoughtfully employed, may serve a therapeutic function is dramatically illustrated by an episode in which a therapist repeatedly asks a girl to name the color of a yellow crayon, to which she responds with increasingly bizarre hand-flapping and peculiar grimacing. As Lovaas slaps her on the thigh the girl abruptly ceases the bizarre behavior and calmly answers, "Yellow." Considering that the procedures depicted in the film appear deceptively simple, and potential audiences contain many do-it-yourself therapists, it would have been advantageous to include a brief commentary on the conditions under which negative sanctions are likely to have either beneficial or detrimental effects.

THE second section of the film shows reinforcement techniques being successfully applied in teaching academic subjects to retarded children at the Rainier School in Washington. In this experimental classroom, which was set up by Sidney Bijou and Jay Birnbrauer, chil-

dren work individually at programmed instructional materials at their own pace. Achievements are rewarded with marks that can be exchanged by the children at the end of the day for an assortment of items at a modest store in the institution. The most striking thing about this classroom is the way in which these children, who previously showed antipathy to academic tasks, assume personal responsibility for their self-study—they check out their own instructional materials, they keep a log of their daily work, and they work productively throughout the session with little external direction from the teacher.

Both of the otherwise excellent films described above are occasionally marred by a demeaning camera technique in which action is briefly arrested on close-up shots of a child's mouth area while he is eating his food rewards. By employing similar photographic tricks a genteel gourmet could be made to look like a pig. What begins as a minor irritant in the first two sections becomes a major focus in the concluding segment that is discussed next.

THE third treatment program, filmed at Patton State Hospital, shows a token reinforcement system being applied to a group of chronic schizophrenic women. In this project, which is modeled after the work of Teodoro Ayllon, attractive sleeping facilities, meals, and numerous ward privileges must be purchased with tokens that patients can earn by performing socially desirable behavior. This simple contingency system is poorly presented, and the practices that are portrayed raises serious questions in the reviewer's mind about the manner in which the reinforcement principle is being implemented.

The opening scenes are a tip-off that program considerations will be sacrificed to some extent for dramatic photographic effects. Several women are photographed through a wire-guard pacing anxiously in the corridor of a ward while simultaneously another patient sings lamentingly in Spanish. Viewers who have a low threshold for unsettling introductions to psychiatric movies are likely to be turned off at this point. Subsequent filmed sequences suggest

that the project photographer had either become overenthusiastic about the alleged importance of immediate reinforcement, or he was overcome by a fetish for poker chips. Scenes shift rapidly from brief displays of patients' behavior to close-up photographs of wizened hands fingering plastic tokens, hands dispensing tokens, hands collecting tokens, hands busily counting tokens, and hands sorting piles of tokens. In many cases it is unclear whether the hands receiving the payments belong to the persons performing the reinforcing responses. To add further to the confusion, most patients appear only once in the disjointed scenes, and, as a consequence, the film conveys no impression that the contingent currency affected any changes in a particular patient's behavior.

The problems with the Patton project, as depicted, are not entirely photographic in nature. Rather, they appear to stem from too ardent an adherence to the animal conditioning paradigm. Both the film commentary, and a supplemental printed interview with the principals involved in the three projects, repeatedly underscore the necessity for making reinforcers instantly contingent upon desired performances.

WHEN the contingencies imposed upon an organism are not clearly specified in advance, as is obviously the case in studies employing animals, interposing a delay between the occurrence of a response and its consequences increases the difficulty of identifying the arbitrary relationship and thereby weakens the influence of postponed outcomes. In the case of humans, however, cognitive activities can effectively mediate a delayed reinforcement contingency without any appreciable loss of behavioral control. While therapists in the first two projects seem more willing to relax the questionable temporal requirements for the administration of rewards, nurses implementing the Patton program pursue the immediacy doctrine relentlessly. Tokens are shoved into patients' hands while they are engrossed in reading newspapers, exploring solutions to their interpersonal problems in group dis-

cussion, or busily performing physical fitness exercises.

In a comprehensive psychotherapeutic program the types of reinforcing events regulating clients' behavior should be gradually modified during the course of treatment. It may be necessary to employ arbitrary tangible incentives in initial stages with patients who would otherwise remain inaccessible or unmotivated. However, efforts should be made to impart reinforcing functions to symbolic and social cues, and to establish self-reinforcing systems so that a person's behavior becomes increasingly governed by the self-evaluative consequences that it engenders. Patients in the Patton project never seem to be weaned from the tokens. In the closing scene, for example, an attractive woman is shown in a group describing a discharge plan with positive anticipation, while the group leader is busily dispensing poker chips for verbalizations of problem solutions. One cannot help but feel that, in this particular instance, the patient has surpassed the therapist in level of functioning.

In summary, readers who are interested in a didactic film depicting behavioral therapists as human, humane, and as effective therapeutic agents will value the first two segments. On the other hand, those searching for illustrative material to discredit reinforcement approaches to the modification of human behavior will find the third section well suited for this purpose.



The triumph of progress is the law of life, as well as of economics. Rigid conservatism may be the ideal for fair weather, but emergencies require invention, and that is why the Athenians, profiting by their vast experience, have improved themselves out of all comparison with you.

—THUCYDIDES



BRFLY NTD

JOHN RICHARD BRAUN (Ed.) *Clinical Psychology in Transition: Selected Readings*. Rev. Ed. Cleveland: World, 1966. Pp. 426.

Graduate training programs in clinical psychology, almost without exception, continue to identify the "scientist-practitioner" as the appropriate role model for students. Since the scientists among clinical psychologists are frequently not practitioners and the practitioners are frequently not scientists, explication of the dual role often must be achieved through self-conscious indoctrination rather than by means of a spontaneous process of identification. Unlike most sub-specialties in psychology, clinical psychology deems it desirable to undertake formal courses to "orient" its graduate students in their chosen profession.

This collection of previously published papers will provide a convenient source-book for such a course. Some 69 articles are categorized under the following headings: I. Historical Development of Clinical Psychology; II. Scientific and Philosophical Status of Clinical Psychology; III. Psychological Tests: Questions of Validity & Use; IV. Problems of Social Responsibility, Values and Ethics; V. Views on Positive Mental Health; VI. Views on Psychopathology; VII. Psychotherapy; VIII. Professionalization in Psychology as a Whole; IX. Legislation & Relations with Psychiatry; X. Studies of Role Satisfaction of Different Clinical Psychologists; XI. The Changing Role of the Clinician; XII. Training of the Clinician; XIII. "Social-Perceptual" Studies with Relevance to Clinical Psychology; and XIV. Some Views of the American Psychiatric Association President.

The graduate student who digests the contents of this volume clearly will have an intellectual understanding of what senior clinical psychologists think about

themselves and the profession and an enhanced comprehension of the problems facing clinical psychologists in the future.

RALPH HEINE

K. M. BYKOV and I. T. KURTSIN. SAMUEL A. CORSON, Sci. and Transl. Ed. *The Corticovisceral Theory of the Pathogenesis of Peptic Ulcer*. New York: Pergamon Press, 1966. Pp. xxx + 321. \$11.00.

The monograph is an outgrowth of Bykov's longstanding concern with CNS and its role in the control of visceral functions in general and of the functioning of the gastrointestinal system in particular, studied by the technique of conditioned reflexes. The present volume, published in Russian in 1949, is being issued as No. 2 in the *International Series of Monographs on Cerebrovisceral and Behavioral Psychology and Conditioned Reflexes*. Professionally, psychologists will be less likely to be interested in those sections of the book dealing with pathogenesis and treatment of peptic ulcer, than in the chapters discussing and experimentally documenting the functional interrelations between the brain and the internal organs, with emphasis on "the significance of interoceptive impulses for the formation of corticovisceral dynamics." For a detailed review of Bykov's earlier work in this area cf. *CP*, March 1959, 4, 86-87.

JOSEF BROŽEK

JOHN P. CONRAD. *Crime and Its Correction: An International Survey of Attitudes and Practices*. Berkeley, Calif.: University of California Press, 1967. Pp. viii + 312. \$1.95.

This interesting overview of major European correctional systems and their American counterparts deals with both

philosophy and activity. The author participated in a one-year survey of European penology, in which he interviewed "middle level" prison officials, and in which he visited a variety of institutions. In addition, his report is based on progressive European and American literature relating to the management of offenders.

The survey data are conceptually integrated by measuring practices in terms of plausible general criteria, and by discussing discrepancies between philosophy and practice. Most important, the book is full of information not readily available elsewhere about physical facilities and correctional objectives. The book also occasionally covers more psychologically relevant data such as details relating to classification schemes and to treatment programs.

Although the survey is not exhaustive, it succeeds in providing a flavor of many programs, and it does so in a style which combines the virtues of a traveler's journal and the records of a sophisticated scholar.

HANS TOCH

L. DELIUS and J. FAHRENBURG. *Psychovegetative Syndrome (Psychosomatic Syndromes)*. Stuttgart, Germany: Georg Thieme Verlag, 1966. Pp. xi + 290. DM 49—.

As might be expected, the major part (pp. 67-242) of the work is devoted to matters of clinical practice—to the medical aspects and consequences of "nervousness" (Nervosität). But there is more to it. The book has an extensive introduction devoted to problems of theory, including a "model" of psychosomatic processes (relating intelligible experience, objectively describable behavior and organ function, with emphasis on the "complementary" character of the psychological and the somatic components). Fahrenberg, associated with the Institute of Psychology and Characterology at the University of Freiburg in Breisgau, wrote a section on the contributions of psychology and psychophysiology. The Appendix contains a historical review of the basic concepts and the titles of the most important works published in the last 300 years. A brush with the volume will be rewarding

if it will do nothing more than bring home the point that affectivity, mood, reactivity, and vitality of an individual—all viewed as closely related to visceral (and muscular) processes—are highly relevant phenomena to the psychologist.

JOSEF BROŽEK

CHARLES K. HOFLING, MADELEINE M. LEININGER and ELIZABETH BREGG. Foreword by MAURICE LEVINE. Introduction by MARY M. REDMOND. *Basic Psychiatric Concepts in Nursing*. 2nd Ed. Philadelphia: Lippincott, 1967. Pp. xx + 583. \$6.75.

This is the second edition of a book written for undergraduate and graduate nurses of a psychiatrist, a professor of nursing, and a teacher of psychiatric nursing. Its coverage is broad and therefore brief on any given topic. Several sections on the nurse-patient relationship are good and contain well-chosen examples. The remaining two-thirds of the book contains a traditional, non-research-oriented but comprehensive coverage of those elements of dynamic and descriptive psychiatry which were deemed to be "pertinent, relevant and 'safe' (quotes mine) in the hands of professional people at their level of training." This does not appear to be a book that will enhance either the sophistication or the professional self-image of the nursing student.

RUTH MATARAZZO

JAMES J. MULLER (Ed.) *The Clinical Interpretation of Tests*. (International Psychiatry Series, Spring, 1966, Vol. 3, No. 1) Boston: Little, Brown, 1966. Pp. x + 292. \$18.50 per year.

The purpose of this collection of essays on the interpretation of psychological assessment procedures is to "... inform psychiatrists as to what representative tests mean to psychologists and how they personally use them." The editor hopes this information will "encourage critical interest."

Selective sampling of instances of the clinical application of psychological tests rather than comprehensive coverage of the subject appears to be the editor's intent. Eleven essays are grouped under three headings: 1) The Evaluation

of General Ability, 2) The Appraisal of Personality, and 3) Research Applications of Clinical Tests.

RALPH HEINE

HENDRICK M. RUITENBEEK (Ed.) *The Psychotherapy of Perversion*. New York: Citadel Press, 1967. Pp. 174. \$7.95.

Both the title and subtitle of this collection of previously published papers are somewhat misleading. Few, if any, of the articles could be said to deal explicitly with the theory and technique of the treatment of sexual perversions, although many offer formulations of the psychodynamics of particular patients on the basis of which treatment of similar cases might be undertaken. The collection also cannot claim, as the subtitle "Studies in depth of the whole literature of perversions . . ." suggests, to be comprehensive in coverage of the topic or especially penetrating with respect to depth of insights offered.

One article by the late Karenorney might be singled out as a particularly refreshing enumeration of the kinds of research needed to increase understanding of perversion. She offers no speculations of her own but she does describe a program of investigations which would extend our knowledge beyond that provided by intuition, uninhibited speculation, or routine extrapolations from one or another psychodynamic theory.

RALPH HEINE

SAMUEL J. WARNER. *Self-Realization and Self-Defeat*. New York: Grove Press, 1966. Pp. 215. \$6.00.

Directed primarily to a lay audience, this book undertakes to demonstrate, with illustrations drawn from case-histories, the many manifestations of self-defeating behavior. A second aim of the author is to interpret the psychotherapeutic procedures which may enable the anxious and frustrated underachiever to use his energy and talent more fully in realizing his potentials.

Professional readers are unlikely to find their knowledge of this syndrome greatly enhanced by this publication but they may find it to be useful for some clients and beginning students.

RALPH HEINE

ON THE OTHER HAND



THE ESP SCHOLAR

There is need for a factual, as distinct from rhetorical, response to S. S. Stevens's review (January, 1967) of Hansel's *ESP: Scientific Evaluation*. Professor Stevens writes: "The scientific community has waited long time for a Hansel to do for ESP what gets done as a matter of course in other areas where experimental findings are rewarded for attention. Now, perhaps, the wait can rest." Despite this unreserved endorsement, your readers might do well to ask: "Is Hansel a believable scholar?" The answer may, perhaps, be found on the one page that Hansel devotes to Haakon Forwald, who is considered by most parapsychologists to be the leading investigator of psychokinesis (one of the two main phenomena of parapsychology).

Forwald is introduced by Hansel (p. 101) as "of the Swiss Federal Institute of Technology at Zurich." The truth is that Forwald has worked for the Swedish General Electric Company (ASEA) continuously since 1935 as an electrical engineer. He holds several hundred invention patents, and at the time of his recent retirement was Chief of their Consulting Office for High-Voltage Switchgear. His only connection with the Swiss Federal Institute has been that in 1933 he attended there a brief series of lectures on physics and engineering matters. This kind of a scholarly error by Hansel is difficult to understand because Forwald did not begin experimental work in parapsychology until 15 years later and it has all been published in English in a dozen papers in the readily accessible (USA) *Journal of Parapsychology*. At the end of every paper, including the one (1952) paper cited by Hansel, Forwald's address has been given as Ludvika, Sweden.

If Hansel's first sentence leaves one wondering whether he has read any of Forwald's papers, his next two sentences enhance the suspicion that he has not. Hansel states that "[Forwald's] calculations are based on the assumption that if the [falling] object moved laterally a greater distance than the height from which it was dropped, then a psychokinetic force was present." This is obvious nonsense, and

nothing like it has ever been published by Forwald. Forwald's evidence for displacement psychokinesis has always depended upon the horizontal motion of cubes and not upon the height from which they fall. In his method, half the time the cubes are wished to go to one side and half to the other. In his research between 1950 and 1952, he used a chi-square evaluation to show the basic effect. Since then, he has compared the mean difference of cube positions to the standard deviation of their scatter.

Hansel goes on to say that "Two objections have been raised concerning Forwald's research." From the tenor of the previous 160 book pages, the reader naturally supposes that Hansel means objections against Forwald's evidence for the reality of psychokinesis. Hansel then quotes from a letter by a retired astronomer to a Spiritualist newspaper 150 words remotely relating to Forwald's theoretical attempts to calculate the magnitude of a hypothetical psychokinetic force that might have caused his anomalous data. Ninety-nine out of a hundred readers will vaguely assume that this somehow constitutes a criticism of Forwald's data as evidence of psychokinesis. The hundredth reader may ask himself: "For what purpose did Hansel include this misleading and irrelevant quotation?"

The second objection raised by Hansel (by the cautious device of ascribing it to someone else) is that Forwald has worked alone. This is not a valid reason for rejecting, as of no serious evidential value, the work of a reputable and professionally qualified investigator, and, if cited as a reason for doubting his findings, it must be coupled with an honest characterization of his professional status. Even more reprehensibly in this connection, Hansel makes no mention of the important experiment done with a witness by Forwald while on a visit to the USA for that purpose, as published in the *Journal of Parapsychology*, 1958, pp. 1-19.

R. A. MCCONNELL
University of Pittsburgh

The ESP Scholar, unmasked by the erudition of Professor McConnell, turns out to make errors, even as you and I. If Hansel's book had proved absolutely correct in every particular, it would stand prime and supreme among works by the hand of man. Oh, how we combed and proofed, and later blushed to find some fourscore boobies in the first printing of the *Handbook of Experimental Psychology*. But what does it prove? What does the ESP Apologist achieve by one more demonstration of human fallibility? May a critic not stutter on some of his facts without jeopardizing the credibility of his thesis? I think he can. But a question of more central concern presents itself: does ESP hang by such a tenuous thread that the testimony of the critic's error can be spun into positive evidence for the believer?

In my review of Hansel's book (*CP*, 1967, 12, 1-3), I made the prediction that the ESP Apologist would comb the pages for slips and oversights, ignoring the meat of the message. Letters to *CP* have confirmed the prognosis concerning the loophole-hunting behavior of the faithful. But among the responses there was an added twist that I had not anticipated. Rhine (*CP*, 1967, 12, 286) seemed to count it a triumph for ESP that its critics capture the headline billing! The protagonist finds it better to be damned on page 1 than ignored. Yes, the ESP Apologist shares the same foible-funded humanity that animates the ESP Scholar.

So, granted that we have flesh and blood in our midst, what is the next question?

For me it remains the same old question about evidence, the one that keeps science chugging forward, and that somehow rescues it from entrapment in the eddies of obstinacy. The question is simple: what are the positive conditions that will allow me to produce on demand an extrasensory or a psychokinetic effect, and produce it at a believable cut above the noise level? Errors in the writing of ESP Scholars and ESP Apologists become little more than spilled ink until that question is answered.

S. S. STEVENS
Harvard University

Not surprisingly discussion of ESP characteristically evokes both affect and rejoinder. The judgment of the editors is that we have now reached the point where further discussion of Hansel's volume and Stevens's review should be halted.

Eds.

Somehow or other the Editors let slip by their correcting pencils the fact that Brian M. Foss (Ed.) is, on page 399 of the August 1967 issue of *CP*, Professor of Educational Psychology, Institute of Education, London, and on page 413 of the same issue B. M. Foss is Lecturer in the Department of Psychology, Birkbeck College, University of London, when, as a matter of true fact, Brian M. Foss and B. M. Foss is the same person and his correct institution is found on page 399. Barbara B. Lloyd, Lecturer in Social Psychology, The University of Sussex, has pointed out to us our error.

Eos.

Psychoanalyst Reports Objective Data

D. H. Malan

A Study of Brief Psychotherapy.
London: Tavistock; Philadelphia:
Lippincott, 1963. Pp. xiv + 312.
\$7.00.

Reviewed by JOHN W. HOLLENDER

The author, D. H. Malan, is Senior Hospital Medical Officer, Tavistock Clinic, London. He graduated at Oxford University with First Class Honours in chemistry and did three years' research in chemistry before starting a medical and psychoanalytical training. He studied medicine at the London Hospital, taking his degree at Oxford. Since then he has worked almost continuously at the Tavistock Clinic. He was granted the degree of DM in 1962. Because of his background in the physical sciences he has always been interested in the scientific approach to problems in psychodynamics.

The reviewer, John W. Hollender, received his PhD in 1966 from the University of Iowa working under Donald Kiesler. His pre-doctoral internship and graduate training was in counseling psy-

chology. His current research involves interviewer effects in the experimental interview and the evaluation of vocational educational guidance of high school students. He is Assistant Professor of Psychology, and Staff Member of the Psychological Center, Emory University.

IT is undoubtedly difficult for the medically trained psychoanalyst to break with the tradition of armchair speculation based on clinical impressions. Malan makes the attempt, and his book is a mixture of clinical impressions and objective data. The work could have been divided into two brief monographs, one reporting the objective research and one containing a more detailed account of the therapy and follow-up evaluation of a few of the cases. Malan sees a positive relationship between degree of objectivity and degree of "clinical meaninglessness" and therefore the objective data is presented in conjunction with the clinical reports.

This book serves several purposes. Some goals are of an expository nature, in the psychoanalytic tradition. These were to publish all cases in some detail, to assess the results psychodynamically on the basis of published evidence, and to conduct a careful follow-up. In addition, Malan was interested in investigating the hypothesis, frequently stated regarding brief psychotherapy, that "The prognosis is best in 'mild' illnesses of acute and recent onset" (p. 21).

The expository and methodological goals were met; nearly one hundred pages are devoted to a detailed and systematic report of the symptoms, treatment, and evaluation of each of the nineteen patients, the evaluations included some intrapsychic criteria, and the median time of the last follow-up contact was two years. The hypothesis was not completely tested. The null hypothesis was retained regarding a relationship between recency of onset and degree of patient improvement. Possible relationships between outcome and "mildness or acuteness" of illness were not investigated.

Positive results are reported but these occur for *ex post facto* hypotheses. Degree of improvement was related to the rated emphasis on transference inter-

pretation in each therapy and to the rated emphasis in transference interpretations linking the therapist and a parent of the patient.

Malan is aware of the serious flaws connected with his investigation and scrupulously catalogues them. These include the small number of subjects, the fact that therapist case notes were the primary source of data, the therapist's knowledge of the major hypothesis, the *ex post facto* nature of the other variables investigated, and the minimal reliability evidence for Malan's ratings and clinical judgments. The author concludes, and the reviewer heartily agrees, "the results are regarded as lying closer to hypotheses than to conclusions" (p. 271). Yet he argues that the investigation is not "a piece of pseudo objectivity, far worse than pure clinical impressionism, because it gives the appearance of exactness and objectivity which is in reality quite illusory" (p. 270). His defense is that the clinical judgments, however subjective they may be, are treated as rigorously as possible once they have been made. The use of subjective rating scales is not a great problem in Malan's investigation but the other methodological flaws do preclude any clear interpretation of the results.

If the study had been based on independent ratings of therapy recordings, with all variables and hypotheses specified in advance, it would still be of minimal usefulness since the assumption is made in this type investigation that the variance contributed by the different therapists is minimal or random. Not only are the therapists assumed to be homogeneous but the patients are also assumed to be sufficiently homogeneous so that "psychotherapy" can be investigated in the abstract, ignoring the contribution of the participants. Malan, of course, is not alone in making the homogeneity assumptions; there are over 100 similar studies in Strupp's 1964 *Bibliography of Research in Psychotherapy*.

MALAN, as a result of his study, does realize the importance of both patient and therapist characteristics, including some therapist characteristics

which transcend traditional therapy schools. "One of the main themes of the present study is that the whole course of therapy depends to a hitherto unrealized extent on subtle factors within the relationship between patient and therapist. In particular, the transference technique which is suitable for one kind of therapist is not necessarily suitable for another. Moreover it is possible that the technique itself may be less important, and certain nonspecific factors such as unconditional acceptance of the patient more important, than has hitherto been realized" (p. 280). It is this realization which will eventually yield more adequate investigation of psychotherapy outcome.

Chapter Ten, describing the therapeutic technique, was the most interesting to this reviewer. The seven therapists met frequently in workshops to discuss their therapies and Malan reports that they initially feared to make transference interpretations in their struggle to keep the length of therapy brief (median number of interviews was 15). They found that they were unable to avoid transference and transference interpretations and their original fears were desensitized as they increasingly interpreted the transference. The technique which evolved contained interpretations of the infantile roots of neurosis, interpretations of negative affect at termination, in fact all of the elements of psychoanalysis except passivity.

Readers interested in the practice of brief psychotherapy should first read other books, such as those by Bellak and Small (1966) or Wolberg (1965). Researchers will find some interesting psychoanalytic hypotheses, and a model of adequate subject follow-up. Unfortunately the book in its entirety is not likely to be of interest to any one reader and the organization is not conducive to locating and separating sections of interest.



... evil times are not always productive of evil alone and unmixed.

—WALTER SCOTT



Life in the Ecosphere

Harold M. Schroder, Michael J. Driver and Siegfried Streufert

Human Information Processing: Individuals and Groups Functioning in Complex Social Situations. New York: Holt, Rinehart & Winston, 1967. Pp. 224. \$7.95.

Reviewed by FREDRIC WEIZMANN

Harold M. Schroder, the senior author, received his PhD from Ohio State University in 1954. Since he received his doctorate he has been at Princeton University, where he is Professor of Psychology. He is also author, with O. J. Harvey and D. E. Hunt, of Conceptual Systems and Personality Organizations. Both Michael Driver and Siegfried Streufert received their degrees from Princeton. After a sojourn in the Army, Driver is now Assistant Professor of Psychology and Administrative Service at Purdue University. Streufert is Assistant Professor of Psychology at Douglass College, Rutgers University.

The reviewer, Fredric Weizmann, received his PhD from Ohio State University, where he studied under Julian Rotter and the late George Kelly. His chief interests are in cognition, personality, and in the structure of psychological theory. After receiving his degree in 1966, he was a Visiting Assistant Professor at Ohio State. He is at present an NIMH post-doctoral fellow with J. McV. Hunt at the University of Illinois.

THIS VOLUME is a successor to Harvey, Hunt, and Schroder's *Conceptual Systems and Personality Organization* (1963). It differs from its predecessor in that it is less concerned with general developmental issues, and more concerned with the interaction between cognitive processes and environmental variables.

This book might best be described as a 'working book.' It is not an exhaustive summary of research generated by a well articulated theory, using several well established research paradigms.

Rather it is an exploratory, frankly heuristic, tentative attempt to establish a domain of inquiry.

The leitmotif of the book is to be found in its interactionist assumptions. Ecologists have proposed the term "ecosystem" to draw attention to the fact that not only do organisms live in environments, but that the relationship between the two involves reciprocal feedback and mutual adaptation. What the authors have attempted to do is to point the direction to a psychology capable of dealing with such a system on the human level. In doing this, they have eschewed the two 'grand traditions' in psychology which placed the locus of behavioral causality either in the person or in the situation.

Most of the conceptualization and research reported in this book may be characterized as a search for constructs, both on the organismic and environmental sides, which will facilitate this kind of approach.

ON the person side, the authors develop the idea of "information processing structures." These are comprised of dimensions, which categorize environmental events, and cognitive "rules" for integrating and combining such information. While this system is somewhat reminiscent of computer models of information processing, such as the one proposed by Newell, Shaw, and Simon (1958), it differs from them in terms of potential flexibility. At least for high-level functioning, alternative 'programs' are available, together with the ability to relate the competing alternatives.

In comparing their model to the more traditional learning-theory approach, the authors state that they are less interested in the content that is learned, and more interested in the structure generating the content, i.e., *how* a response is learned as opposed to *which* response is learned. They are also more interested in the way the content is subsequently utilized for adaptive purposes. For the authors, these interests clearly imply a need for, and a partial definition of a concept of cognitive structure. It raises in this reviewer's mind the question of whether the recent popularity of cognitive theory and 'mediated' S-R models

reflects, in part, a change in our conceptual 'atom,' or basic unit of study, from behavior in discrete situations to behavior which is sequential, ongoing, adaptive, and serially organized. Concepts such as cognitive structure certainly seem more germane and necessary in the latter context.

The information processing model also differs from the traditional individual differences approach in several important ways. While it finds some consistency in persons due to long-term (i.e. developmental) environmental differences (with a slight genuflection in the direction of neurological factors) such consistency is at the level of information processing, not at the level of traits. Further, individuals are not necessarily consistent across situations or content areas. The authors thus do not commit the abiding sin of trait approaches, which is to account for more consistency than you can actually find. The authors would also avoid concepts such as 'cognitive style' or 'creativity' when applied to individuals without regard for environmental parameters.

Most of the empirical work the authors report is focused on the effect of environmental factors, such as complexity, reward value, etc., upon attained levels of information processing. The authors manage the difficulties inherent in measuring sequential changes in complex systems with a high degree of ingenuity, if not elegance.

IN some ways, however, the research concerned with the application of the information processing approach to attitude change is the most 'finished' portion of the book. The explanatory power of the model is most clearly demonstrated here. The authors' conclusions are more closely supported by empirical data, with fewer inferential jumps, than is true throughout the rest of the book. The case for the superiority of the informational approach over traditional "balance" models of attitude structure and change is convincingly argued.

Throughout the book, one senses a great deal of uncertainty about the construct of motivation. The authors seem to be reacting to two competing

claims. On the one hand, there is the desire to have a general theory of motivation. On the other hand, motivation seems to be so inextricably bound up with the cognitive system that it becomes difficult to reduce complex behavior to any of the classical bases of motivation.

Unfortunately this reviewer has no answer for this dilemma. It may be an inherent difficulty in any complex cognitive theory. George Kelly solved, dissolved, or evaded (depending on your point of view) the problem by identifying motivation completely with cognitive process, and then dropping it as a separate construct. The authors do this implicitly, but they seem nervous about it.

Every book has invisible collaborators and fellow travelers. The diverse names of Brunswik, Lewin, G. H. Mead, Dewey and Kelly and Rotter seem especially relevant here. If high level functioning is the ability to combine and synthesize various perspectives into a workable and coherent unity, then the authors of this book have functioned at a very high level indeed.

This reviewer found the book to be highly provocative and stimulating. It is recommended reading for all those interested in complex human processes.

Without Psychology

Robert M. MacIver

The Prevention and Control of Delinquency. New York: Atherton, 1966. Pp. vi + 215.

Reviewed by ROBERT L. SCHWITZGEBEL

The author, Robert M. MacIver, is former President and Chancellor of the New School for Social Research. He has held major appointments at Columbia University and at the University of Toronto and is the recipient of eight honorary degrees. Formerly Di-

rector of New York City's Juvenile Delinquency Evaluation Program, he is author of Community, A Sociological Study and The Modern State

The reviewer, Robert L. Schwitzgebel, is Assistant Professor of Psychology at UCLA. He received an EdD in counseling psychology from Harvard and a PhD in general experimental psychology from Brandeis University, both in 1964. After a year of working as an aide with the Albert Schweitzer Flying Doctor Service, he continued his study of "wild life" by conducting research with juvenile delinquents in Boston. With his twin brother, he administered the "Streetcorner Research" project which recruited subjects by contacting youths on streetcorners and offering them a part-time job to talk into a tape recorder. The subsequent use of various operant conditioning techniques has been reported in Streetcorner Research.

"THERE is delinquency in all areas"; writes R. M. MacIver in his latest volume, *The Prevention and Control of Delinquency*, "it is always a question of degree" (p. 7). The book, originally a report based on six years' study of agencies concerned with juvenile delinquency, cites rather typical statistics to show a substantial increase in juvenile crime beyond that expected by a simple increase in youth population. Although the preponderance of juvenile delinquency is found in low-income groups, it is noted, affluent neighborhoods also have "alarmingly high" rates.

The author suggests that this increasing amount of delinquency may be produced: (1) in small towns by the influence of big-city television, (2) in commuter areas of big cities by the father's absence from home, (3) in central urban areas by poverty and lack of recreation facilities, (4) in migrant groups by a sense of inferiority, and (5) sometimes in individuals by a multiplicity of factors so complex as to appear spontaneous. Seemingly, delinquents spring up from nowhere, anywhere, and everywhere. Approximately 100,000 of these youths will have found their way into correctional institutions in any given year. Within five years after discharge, about 50 per cent will not be

seen again, and about 50 per cent will be recommitted. In short, the cure of delinquency matches the obscurity of its causes.

In such a situation, one might certainly welcome "an informed, concerted, and well-defined directed strategy" for the prevention and control of delinquency; such is the stated purpose of MacIver's study (p. 6). His approach is predominantly sociological. The McCords, Gleucks, Redl, and Wineman are given the usual and justified recognition. But the classic psychological contributions of Münsterberg (*On the Witness Stand*), Hartshorne and May (*Studies in the Nature of Character*), and Eissler (*Searchlights on Delinquency*), or the more contemporary volumes of Piaget (*The Moral Judgment of the Child*), Bandura and Walters (*Social Learning and Personality Development*), and Eysenck (*Crime and Personality*) are not mentioned. Only two references, out of 135, are made to psychological journals.

MACIVER leads his readers through an ever-narrowing spiral of "causes" of delinquency—the impact of a total culture, of neighborhood environment, of school conditions, of family relations, and finally the particular mentality of the youths themselves. Regarding this last item he refers specifically to "temperaments," "emotional make-ups," and "psychological traits." Psychologically oriented readers who, by this time, have not become disinterested or alienated are given opportunity for discouragement when the author concludes (p. 91) that, because some youths remain non-delinquent who seemingly meet all the conditions necessary for becoming delinquent, "getting down to the precise causation of individual cases is therefore not feasible."

The last half of this 200-page volume suggests strategies of intervention through various established agencies such as the school, police, court, and custodial institutions. Thirty-seven recommendations are specifically enumerated. These include, for the most part, apparently noncontroversial propositions such as the desirability of the prevention rather than the rehabilitation

of delinquents, of availability of guidance counselors to whom difficult cases can be referred. Unfortunately, there is no thorough examination of such propositions in terms of, say, a rigorous systems analysis. Any serious and realistic proposals would have to examine alternate cost estimates of preventive education, subsidized lawful amusements, increased surveillance and apprehension, and so forth.

One of the more valuable aspects of MacIver's book is an informal survey of recent and diverse anti-delinquency programs including Mobilization for Youth, Highfield Group Center, All-Day Neighborhood Schools, Synanon, Henry Street Settlement. The reader is aided by a good subject-author index.

In the last few years, an increasing number of psychologists have expressed the desire or need to extend 'creative pseudopods' from the laboratory or clinic into the community. The discipline of community psychology is in a formative stage, and psychologists would be well-advised to know the present state-of-the-art, since an experimental program—no matter how innovative (or especially if it is innovative)—cannot survive in the community without recognition of limits imposed by necessary conservative and stabilizing influences in the society. MacIver's survey of projects is useful in indicating some of these parameters. However, the reader will find very little here in terms of specific suggestions regarding potential contributions that a psychologist might be uniquely qualified to make toward the problem of delinquency prevention.

Any book which could actually deliver on a promise to outline a realistic strategy for the control of delinquency would probably draw wide public attention. Issues of ethics, Constitutional rights, moral obligations, 'free-will,' etc., would surely be debated vigorously, if not always intelligently. In all likelihood, the present volume—for better or for worse—will be spared such notoriety.



In Search of a Connection

Merrill Roff, Walter Mink and Grace Hinrichs (Eds.)

Developmental Abnormal Psychology: A Casebook. New York: Holt, Rinehart & Winston, 1966. Pp. xii + 450.

Reviewed by SEBASTIANO SANTOSTEFANO

The first author, Merrill Roff, received his PhD in 1933 at Cornell University. After some years at Indiana University, he is now Professor at the Institute of Child Development, University of Minnesota, where he has emphasized developmental theory and aptitude and personality measurement in his work. Walter Mink, the second author, received his 1957 PhD from the University of Minnesota. Since 1958 he has held the position of Associate Professor at Macalester College in St. Paul and has been in private practice. His main interests have centered around language theory and personality motivations. Grace Hinrichs received her PhD from the University of Minnesota and is now at Augsburg College, Minneapolis, centering her work on learning theory, counseling, and child development.

The reviewer, Sebastiano Santostefano, received his PhD from Pennsylvania State University in 1957. After completing a Post Doctoral Fellowship in Clinical Child Psychology he spent six years as Assistant Professor and Chief Psychologist, Child Psychiatry Division, University of Colorado School of Medicine, before assuming a joint appointment at Clark University and Worcester Youth Guidance Center in 1964. His research has focused upon a developmental analysis of psychopathology in children and he is now Associate Professor at Boston University School of Medicine.

THIRTY years ago, very likely because of the influence of Freud's writings, the area of child development research shifted its emphasis from longitudinal growth studies, with their pri-

marily biological emphasis, to studies of the effects of childhood on adult personality. Investigations began to focus upon select child experiences and parental practices associated with personality development in the child. Recently though some workers have been struck with the different modes various individuals use to cope with the environment or those a single individual uses in handling various life situations. As a result interest has grown in using, for the study of personality development, organismic-comparative principles (emphasizing the importance of following the total individual and his environment) and developmental principles (emphasizing the emergence, in the course of development, of new behavioral properties not contained in any earlier stage of the individual's life history, e.g., Kaplan, 1959). Thus it seemed to this CP reviewer that a book titled *Developmental Abnormal Psychology* and reporting childhood histories and their adult outcomes represented a timely contribution to the growing interest in the development of psychopathology.

However, the reviewer's expectations were not at all met. The expectations of the authors that graduate students and professionals will find this a useful source book in courses in abnormal psychology and personality development will, none the less, very likely be actualized.

THIS BOOK is a product of a research program directed by the senior author for the past fifteen years and concerned with determining the relations between childhood problems and adult adjustment. First, case histories of male patients seen in child guidance clinics were located. Then, by examining selective service records, the adjustment that more than 10,000 of these individuals made in the military when they reached adulthood was determined. Child histories were then sorted in terms of adult outcome and compared in the hopes of detecting distinguishing items (e.g., peer reactions, parent-child relations, school behavior) which might relate to later outcome.

Here the authors present 31 cases from their larger sample. With each of these, the reader has the opportunity of examining the home, school, and community experiences of a child (described at the time they occurred) whose behavior as an adult in the military showed an adequate social adjustment or subsequently led to one of several psychiatric disorders (e.g., schizophrenic reaction, sexual deviation, anxiety reaction).

The reader's opportunities for learning about the development of psychopathology, however, stop abruptly with these two sets of information, viz., childhood history and adult outcome. The two are not related by the authors.

Since the book emerges from a project concerned with determining relations between childhood history and adult adjustment, the reader could legitimately expect the authors to share some of their ideas on how they connect these phases of life. Students will be at a loss without specific guidance from the instructor, in finding possible "developmental" contributions of the case material, and only the more sophisticated developmental theorists and clinical teachers could be expected to assist them. See for example the case of Daniel who was impulsive, aggressive and hyperactive as a child and withdrawn as an adult.

RATHER than devote space to items such as a brief survey of the child guidance movement and a discussion of varying techniques used by clinics, it would have been more helpful to the readers if the authors had presented some of their ideas, gained from their many years of experience studying case histories, concerning how they would predict from child histories to adult outcomes. On what part of the history would they base predictions, and what areas of functioning would the predictions cover. Or the authors could have included for each case brief observations on the "lines of continuity" which they identify within the changing response patterns of the growing child and of his adult adjustment. They could have noted whether or not these behavioral lines relate to present day develop-

mental hypotheses or suggest new ones. (Cf. Escalona and Heider (1959) and Kagan and Moss (1962) who also use history-outcome data to serve these ends.)

Although the authors never directly discuss the connections (conceptual or empirical) they make between history and outcome, they intend to include both cases that show a "clear connection" and cases that show no connection; and they note that greater agreement is found between adolescent and adult diagnoses made on the same individual than is found between child and adult. All this leaves one with the impression that their guideline in comparing history with outcome is the degree of isomorphism observed between the forms of child and adult behaviors.

However, the authors' bibliography should be very helpful to the reader interested in pursuing the various reports made of select details of the research and in obtaining some of the authors' conceptual approach to their data.

This book makes a very worthwhile contribution in presenting case histories sufficiently detailed to be used as excellent examples illustrating the interview and case management processes employed in child guidance clinics.

The Jolly Green Giant

Herbert Stroup

Bureaucracy in Higher Education.
New York: The Free Press, 1966.
Pp. xi + 242. \$5.95.

Reviewed by CARROLL L. SHARTLE

The author, Herbert Stroup, is an educator and sociologist with over twenty years' experience as a teacher and administrator. He is at present Professor of Sociology and Anthropology, Chairman of the Department of Student Services and Dean of Students at Brooklyn College. He has a PhD from the

Graduate Faculty of Political and Social Science, The New School for Social Research.

The reviewer, Carroll L. Shartle, received his PhD from The Ohio State University, 1933, and has taught at Michigan State and George Washington Universities. He is now Professor of Psychology back at Ohio State and also Associate Dean (Research) in the College of Commerce and Administration. He was formerly Director of the Ohio State Leadership Studies involving studies in educational, governmental, and business organizations. From 1961-64 he was Chief, Psychology and Social Sciences Division, Office, Director of Defense Research and Engineering, Pentagon. He is author of Occupational Information and Executive Performance and Leadership.

BUREAUCRACY for this author, borrowing mostly from Weber, is a large scale organization with a complex but definite social function with specialized personnel, a system of rules and "a carefully contrived hierarchy of authority" with the social function carried out impersonally. One can take exception that a large higher educational institution has a "carefully contrived hierarchy." Or as is pointed out in a later chapter, in some instances a hotbed of divisive power blocks. One is left not quite clear when an organization is really a bureaucracy. But nonetheless, the book does a pretty good job of justifying that a college is a bureaucracy and in particular an "intellect incorporated."

The book raises the question of the unfortunate influence of business enterprise on performance in higher education, but omits the big giant that one can argue is taking over higher education—namely the federal government with its multichannels of fiscal and program controls and evaluation.

There are nine chapters on the nature of bureaucracy and relevant college structure and function that fit the model including components of status for the faculty in reading papers, publishing and off-campus consulting.

Two chapters are devoted to the system. These are essays on the "great chain of academic being" and are at the

other end of the spectrum from systems as we see systems in modern behavioral science research.

Driving forces are described under myth, matter, power, charisma, and ceremonialism. Charismatic elements are assumed to be quite at home in the academic bureaucracy and appear in the selection and promotion of office holders. Ceremonialism is obvious and is revealed in many forms.

A concluding chapter concerns the college in the community and points out the ambivalent situation of being independent but yet subject to environmental influences.

AFTER 145 pages of literature quotation, review, and discussion, the author begins to assert himself in a chapter on impersonality and rules and lets himself go with ways to cut red tape and with interesting examples of the inner working of administration including starting rumors to achieve one's objectives.

The book is written in clear style with references at the end of chapters. Sociological jargon is plentiful but the language seems less that of a sophisticated social scientist and more an educator and dean of students who seems not too dissatisfied with the bureaucracy of the college.

References are predominately to the literature in the 1940's and 1950's with only one or two after 1961. The book thus omits some of the exciting work on organizational behavior that has been published during the last five or six years.

Psychologists interested in organizational behavior as related to higher education should find the book an interesting contrast to more empirical approaches which will emerge and which, as related to other types of organization were presented in a review of modern organizational theory by D. S. Pugh in the October, 1966, *Psychological Bulletin*.



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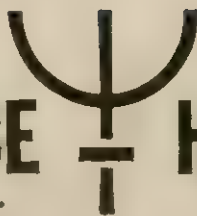
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David L. Horton, University of Kentucky

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and the prospects
for future development**

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In the Beginning was the Grammar

Frank Smith and George A. Miller (Eds.)

The Genesis of Language: A Psycholinguistic Approach. (Proceedings of a Conference on "Language Development in Children" sponsored by the National Institute of Child Health and Human Development, NIH.) Cambridge: M.I.T. Press, 1966. Pp. xii + 400. \$10.00.

Reviewed by ROGER BROWN

The first editor, Frank Smith, is a doctoral candidate in the Department of Psychology and Researcher in the Center for Cognitive Studies, Harvard University. The second editor, George A. Miller, is Professor of Psychology and Director of the Center for Cognitive Studies, Harvard. He is author of *Language and Communication*, *Psychology: The Science of Mental Life*, and *The Psychology of Communication: Seven Essays*. He is also the President-Elect of APA.

The reviewer, Roger Brown, is Professor of Social Psychology and Chairman, Department of Social Relations, Harvard University. He is author of *Words and Things* and *Social Psychology and of numerous research papers on the acquisition of a first language in childhood*. His studies are chiefly longitudinal and deal with just three children known in the literature as Adam, Eve, and Sarah.

THIS is a book about two sorts of genesis: the origin of language in the prehistory of the species and the origin of language in the preschool years of the child. The book is the report of a conference and it is an ornament to its genre. There are stimulating papers by David McNeill, Jerry Fodor, Dan Slobin, Mildred Templin, and others. There is a formal discussion by James

Jenkins and a small amount of general discussion which has been edited to very good effect by Smith and Miller.

David McNeill starts the book off with a brilliant and tendentious review of "Developmental Psycholinguistics." His title is an invention designed to mark out the contemporary study of child speech from what has gone before. The difference from what has gone before is that Developmental Psycholinguistics conceives of the end state of development—adult linguistic knowledge—in the highly explicit and abstract terms of generative transformational grammar. Transformational grammar, the creation of Noam Chomsky and his associates at M.I.T., stresses the productivity of linguistic knowledge, the fact that everyone speaks and understands sentences he has never heard. With this aspect of the terminal state in focus the central developmental question becomes: How does a child extract from the finite sample of speech to which he is exposed the latent structure that will generate an infinite set of sentences?

In every theory of language learning there must be, as Jerry Fodor points out in the present volume, some conception of intrinsic structure, some sort of innate component. The child is always assumed to learn on the basis of principles not themselves learned. So long as psychology did not fully apprehend

the complexity of adult linguistic knowledge it was possible to believe that theory might succeed with such simple "givens" as association by contiguity, response selection through reinforcement, and stimulus generalization. Now that the complexity of the terminal state is more fully appreciated it appears that we cannot get there by these means. We need a more powerful first-stage rocket, an innate component with greater thrust.

Linguistic science has promised to make the innate component more than a kind of arbitrary handicap the theorist assigns himself. The languages of the world, diverse as they obviously are, also manifest some common properties. These "linguistic universals," since they represent what the human brain everywhere does, in a language way, should provide a foundation for serious proposals as to the character of the innate component. The invention of language by the species presumably depended upon the evolution of this component and the critical period in childhood when languages are most easily learned is presumably bounded by changes in this component. These ideas seemed to be acceptable to almost everyone at the conference but there was nevertheless plenty to argue about. The universals that are presently backed by data are mostly surface characteristics that do not go far toward explaining language acquisition. Deeper universals of the kind that would help us to understand acquisition can be rather freely imagined and so the positions taken by participants depended less on their knowledge of comparative linguistics than on the kind of thing they were prepared to think possible.

McNeill's paper makes a good start because it vigorously sets forth an extreme position on the nature of the in-

nate component. McNeill believes that the child must have, from the beginning, much of the knowledge represented in what is called the "base component" of a generative grammar. This includes knowledge of the sentence relations called "subject," "predicate," and "object" as well as knowledge of whatever hierarchy of grammatical categories and subcategories may prove to be universal. The latter claim is developed in some detail.

McNeill argues from results obtained in the longitudinal studies of the acquisition of English that have been carried out by Susan Ervin-Tripp, Martin Braine, Roger Brown, and others. All of these studies find that the child's speech develops by progressive differentiation from such gross categories as the so-called "Pivot" and "Open" classes through the familiar major parts of speech like the noun and verb to such fine subcategories as articles, demonstrative adjectives, transitive and intransitive verbs, mass and count nouns, and so on. McNeill argues that these classes could not possibly be discovered by the child from distributional evidence alone. The categories of English or any other language, he contends, are drawn from a universal set; distributional evidence only serves to indicate which of the possible categories are relevant to the local language. If someone wanted to make fun of the view he might say that the child's mind is represented to be a Droste chocolate apple which, being lightly tapped, falls into foreordained segments.

In order seriously to test McNeill's thesis against the data of language development it is necessary to make some explicit assumptions at points where he may not yet wish to be explicit. A given grammatical subcategory is a number of things—a certain detailed distributional pattern, a position in an abstract hierarchy of classes and, often, a rough sort of semantic. In which of these respects could it be innate? Certainly the distributional pattern could not be since that is language-specific. The hierarchical position might be but it is hard to see what the child would gain from this knowledge. Suppose it were the semantic correlate that was innate. How could such knowledge facilitate the acquisition

of grammar with reference, for example, to English verbs?

In child speech, verbs at first occur in a generic form, without auxiliaries or inflections, unmarked for tense, aspect, or mode. The first inflection to become frequent is the progressive *-ing*. In adult English, verbs of one subcategory, those that name "processes" such as *walk*, *talk*, *eat*, freely take the progressive inflection, while another subcategory, those that name "states" such as *equal*, *need*, and *know*, do not. It is quite natural to say "She is singing the song" but rather strange to say: "She is knowing the song."

Before he uses the progressive inflection at all the child uses both state and process verbs with apparent semantic appropriateness. Let us assume that as each verb is learned, the semantic entry includes not only elements of meaning peculiar to the particular verb but also the semantic aspects of all applicable innate subcategorizations. This would mean, in effect, that *like* is tagged as a "state" and *walk* as a "process," it might also mean that the former is tagged as "involuntary" and the latter as "voluntary" and that both are tagged as "animate." When the child begins to attend to distributional aspects of English, such as the fact that some verbs take *-ing* and some do not, he will have a set of ready hypotheses to account for the cleavages that occur. He will check the distributional data against the various pre-established subcategorizations to see which of the latter is determinative. In the case of *-ing* the process-state subcategorization defines the proper dotted line.

McNeill might reject this particular specification of his position but I think that implications to which data are relevant only appear when the position is made more specific than he has made it. Making the assumptions we have made about *-ing* there is support for the notion of an innate semantic in the remarkable fact that when children start to use the progressive inflection they make no errors or almost no errors in observing the process-state distinction. However, another fact is less accommodating. Children make errors for many months in the distributional detail associated with the noun subcate-

gories called "mass" and "count." It is not apparent why these errors should not also be forestalled by an innate semantic. Yet another fact is seriously unaccommodating. Children have to operate with some categories that are semantically "unprincipled" such as the verbs that are "regular" or "irregular" in their form of past tense inflection. If children have innate subcategories should they not, on first encountering the fact that some verbs take *-ed* while others do not, operate as if they expected one or another of the innate principles to govern the cleavage? In the data we have seen, at least, there is no trace of this kind of thing

JERRY FODOR's paper offers a conception of the innate component that Jenkins, Slobin, and some others at the conference seemed to find more credible than McNeill's. Fodor's child is not equipped with structural information but with a set of rules of inference designed to discover in a speech corpus just the kinds of relations that figure in linguistic descriptions. Dan Slobin, in his paper on the acquisition of Russian as a native language, makes masterful use of comparative data to illuminate theoretical issues raised by Fodor and McNeill and by the work of Ursula Bellugi, and others. Denis Fry offers a description of the child's acquisition of the phonological system of English which is very unlike McNeill's and Fodor's discussions in the attention it gives to imitation, reinforcement, and experience in general.

A point of particular interest in Fry's paper is his description of the work of London's Nuffield Hearing and Speech Centre and the success the Centre has had in training children to speak who had been diagnosed as "born deaf." The Centre has, in the first place, found no child "in whom it was impossible to develop responses to sound." The child with a very severe hearing loss who comes to their attention is fitted with hearing aids at the earliest possible age, often at 9 or 10 months and the mother is instructed to talk to him even more than she would to a normal child. These children develop the full system of English phonology, their speech is highly

intelligible, and is very different from what we know as "deaf speech."

The two geneses which were the occasion for the conference intersect in Eric Lenneberg's paper on the natural history of language. He summarizes the impressive evidence he has put together in recent years which argues that there is a critical period for language acquisition, a period that begins in the second year and ends at puberty. While the specific neurophysiological bases of the beginning and end of the period are unknown Lenneberg is able to describe general factors which may constitute the substrate of language ability in children. By implication it is the absence of this substrate that accounts for the inability of animal species to acquire language. In spirit, Lenneberg's discussion is sympathetic to the Fodor and McNeill position but when Fodor asked Lenneberg whether he knew of any genetic mechanism capable of transmitting the kind of information that he (Fodor) and McNeill had placed in the innate component Lenneberg replied that "he certainly knew of nothing like it."

NEAR THE END of the book Premack and Schwartz describe a glorious "science-fiction" experiment they have undertaken. It is designed to investigate the linguistic capacity of chimpanzee and, if sufficient capacity is found, to use chimpanzee as a stand-in for the human child in all the language learning experiments which humane considerations now forbid. Their chimpanzees are to be given a better chance than the Kelloggs' Gua and the Hayes's Vicky ever had. They will not be expected to imitate human speech, a task for which chimpanzees are ill equipped. The investigators have invented an artificial motor and auditory system: a joystick that swivels into various positions to produce sounds which model Jakobson's distinctive feature system. Human parent-surrogates will converse with one another, using baritone and soprano joysticks in the baby chimp's presence and we shall see what he will learn. Premack and Schwartz do not think that any infra-human species has the capacity to acquire grammars as complex as those humans use but they propose to try the

chimps on various sorts of simpler grammars. The whole approach to language is much more systematic and sophisticated than any previous experimental study of animal capacity.

The discussions, recorded in this book, were punctuated as are all discussions of child speech, by awed exclamations at the wonder of it all. How miraculous it is that the child can learn something so complex in a few years time. But, with reference to what is it wonderful? Is it more wonderful than the acquisition of morality or the development of a sense of self or the learning of social structure or is it simply the first of these to be described explicitly and deeply. Probably language learning seems wonderful chiefly because it is so incommensurate with the simplistic principles we bring to its explanation. In the end it will turn out to be as ordinary as an anthill—or the solar system.

Fundamental But Uneven

John Gaito

Molecular Psychobiology: A Chemical Approach to Learning and Other Behavior. Springfield, Ill.: Thomas, 1966. Pp. xix + 259.

Reviewed by JERRY HIRSCH

The author, John Gaito, has his PhD from the University of Pennsylvania and has taught at Wilkes College, Lake Forest College, Kansas State University, and is now at York University, Toronto, where he is Associate Professor and Director of the Molecular Psychobiology Laboratory. He is working on the neurological and biochemical correlates of behavior and continuing his interest in experimental and statistical methodology.

The reviewer, Jerry Hirsch, is still about the same as when he last reviewed for CP, Professor of Psychology at the

University of Illinois, except that now he is also Professor of Zoology and Director of the Interdepartmental Biopsychology Training Program and a member of the executive council of the Animal Behavior Society.

"WE can speak of the difference between the behavior of a trained and an untrained animal as learned, provided that their genotypes are similar, but the behavior of a single individual cannot be spoken of as learned" (Marler and Hamilton, *Mechanisms of Animal Behavior*, Wiley, 1966, p. 619). This truth, wholly unfamiliar, with its tradition-uprooting significance is now transforming the conceptual foundations of behavioral science. I had expected that Gaito's otherwise useful exposition of cell biology would prepare his readers to appreciate immediately why Marler and Hamilton's observation is both correct and so important. Even though the second of the three sections in Gaito's book is entitled Behavior Genetics, still another opportunity for conceptual progress has been lost to typological thinking.

Despite these limitations his book is packed with valuable information. Its bibliography alone includes so much that has now become required reading for anyone who wants a mechanistic understanding of what happens when an organism behaves. But it is marred by lack of an author index and by careless production.

The first section is "devoted to non-molecular topics." It begins by considering the components of the generalized cells and the nerve cell, and then moves "up" to the level of integration comprising the nervous system and the brain, where it describes the cerebral cortex, the brain stem reticular formation, the limbic system and sensory systems.

Section II, misnamed Behavior Genetics, is largely devoted to the molecular biology of the nucleic acids. Because it omits the population concept, fundamental to behavior-genetic analyses, neither the author nor his readers can appreciate the importance and methodological generality of the lesson that sooner or later must be gleaned from the learning-cholinesterase fiasco sum-

marized earlier on pp. 46-48 (see Reductionistic Naiveté in Hirsch, *American Psychologist*, 1967, 22, 118-130), nor can they counteract the deceptive, unjustified and dangerous resurgence of hereditarianism now sweeping former bastions of environmentalism (see A. R. Jensen's February 17, 1967, address to the American Educational Research Association in New York).

While lip service is paid to the non-typological individuality concept near the end of Section II, the tone of its last chapter—Disorders of Definite Genetic Origin—both exemplifies and reinforces the widespread misconception that genetics contributes mainly to our understanding of the abnormal. Albeit, occasionally the typological framework is successfully breached, e.g., "It is important to analyze the nucleic acids of single animals in that memory is an individual problem, i.e., if one averages over a number of animals, interesting results can be obscured" (p. 159)—of course, genetics would have been impossible had Mendel averaged his data!

STUDENTS of behavior can learn much that is as fundamental for understanding learning as Mendelian genetics is for understanding heredity, if they will do the work required to comprehend what is covered in Section III. This is Gaito's specialty and here he has assembled much that is valuable. An inconsistent picture emerges of Hyden's 25-year pioneering efforts on nucleic acids in the nervous system and in memory, compare pp. 138, 161, and 182. (Also see the accounts of his earlier work by Caspersen and by Hyden in the *Nucleic Acid* symposium of the Society for Experimental Biology, Cambridge University Press, 1947. Historically they establish for Hyden an incontrovertible priority for which Gaito shows no appreciation.) In fairness to Gaito, however, it must be acknowledged that the inconsistencies remain unresolved in the original literature. Apparently Hyden has never explicitly disowned his earlier interpretations after he and Egyhazi proposed the genome-stimulation hypothesis in 1962. Since then, though, he has maintained that hypothesis consistently and provided additional evidence for it (see

Hyden and Lange, *Die Naturwissenschaften*, 1966, 53, 64-70, in English).

A 25-page Appendix re biochemical methods and proced

Motivation 1966

David Levine (Ed.)

Nebraska Symposium on Motivation 1966. (Current Theory and Research in Motivation, Vol. XIV) Lincoln, Nebraska: University of Nebraska Press, 1966. Pp. ix + 209. \$2.75 paper; \$5.95 cloth.

Reviewed by CHARLES N. COFER

The editor of this volume, David Levine, is about the same editor as he was when the 1965 volume appeared. He is still Professor of Psychology at the University of Nebraska and is still busy editing symposium papers.

The reviewer, Charles N. Cofer, is Chairman of the Department of Psychology at the University of Maryland. He has taught at NYU and at Pennsylvania State University and once before at the University of Maryland. His interests in motivation are largely systematic and his major research interests are in verbal behavior and memory. He is editor with Barbara Musgrave of two volumes: Verbal Learning and Verbal Behavior and Verbal Behavior and Learning: Problems and Processes and author with Mortimer Appley of Motivation: Theory and Research.

MOTIVATION is a word which means what authors and editors choose it to mean, and in this book, the fourteenth volume of the Nebraska series, it seems to mean more rather than less. This is to say that the topics at which the authors in this symposium tilt are a variegated set. There is, in other words, little unity of definition or topic in this volume, and its value lies in its revelation of what certain authors have said, under the constraint of participating in a symposium on motivation.

Robert Holt concerns himself with the assessment of libidinal and aggressive motives from Rorschach protocols, despite prior reservations concerning

whether the intensity of motives is reflected in Rorschach variables. He acquaints the reader with his elaborate scoring system, evidence for its reliability, and how the scoring categories relate to one another. In general, the inter-correlations are low, but factor analysis reveals two underlying dimensions, one on which "primary process variables" are loaded and another one characterizable as intellectual ability. (A number of objective measures, included in the analyses, help to define these dimensions.) Clinical ratings and other test scores are compared with the Rorschach scores: Holt finds no evidence for "a tension-reduction view of motivation" in his data, and he seems to conclude (p. 43) that Rorschach scores measure cognitive controls which enter into motivation, rather than the motives themselves. It would have been helpful had Holt spent some time discussing motives and controls theoretically, or discussing at some length how the verbal responses of the Rorschach protocol may be taken as indicative of motives, on the one hand, or of controls, on the other.

C. J. BURKE treats classical conditioning on the foundation of a linear model based on stimulus sampling theory and, in doing so, is able to describe several aspects of this kind of conditioning without recourse to concepts of motivation and reinforcement. In this analysis, his paper is a sequel to the

one by Estes in the 1958 symposium. Joseph Masling warns of the influence that an experimenter or an examiner may have on the results obtained, cautions that are now well known through the writings of Rosenthal, Orne, and Masling, and reviews the evidence from a variety of sources. The title of William Malamud's paper, "The concept of motivation in psychiatric practice," led this reviewer to anticipate an incisive analysis of the effects on psychotherapy of varying conceptions of motivation, for example, a comparison of therapy based on analytic theory with its emphasis on drives with therapy as conceived by George Kelly, whose theory places little reliance on motivational notions. Malamud, however, seems to view motivational notions as providing a general framework in which to view symptomatic behavior and the processes of therapy, and he is not specific with respect to motivational issues.

Vincent Dethier, in a provocative paper, raises the question whether insects, such as the blow-fly, are motivated. He contrasts behavioral, neural, and motivational descriptions of a feeding episode in this animal, concluding, I believe, that while some motivational terms can have application to aspects of this behavior, it is doubtful that the use of motivation "adds much to our understanding" (p. 128). Dethier, however, does indicate that the quest for motivational factors in the blow-fly's behavior has required that tests be carried out that would not otherwise have been applied and seems to express the belief that there may be elements common to the feeding of blow-flies and "higher" organisms, even though the behaviors may not be homologous. His warning concerning definitions of motivation which are "so broad and indiscriminating as to construe all behavior as motivated" (p. 119) is well worth heeding, in the case of vertebrates as well as insects.

Harry Helson's paper states the motivational implications of adaptation level theory and applies his formulation to reinforcement, vigilance, perceptual organization and motivation, and to motivational aspects of cognitive states. He is emphatic in his stress on the importance of stimulus factors in these

areas of inquiry, either instead of or in addition to the internal states so long the favorites of motivational theorists. The "driving power of conscious perceiving and thinking" (p. 179) must be recognized as "sources of motivation, which are responsible for man's unique position among all living things."

Over-all, my evaluation of this volume is mixed; it contains some good and provocative things, but there is relatively little reward here for one whose interest in motivation lies primarily in the most basic question: What is its systematic and theoretical status?

Territory, That's What It's All About

Robert Ardrey

The Territorial Imperative: A Personal Inquiry into the Animal Origins of Property and Nations.
New York: Atheneum, 1966. Pp.
xii + 390. \$6.95.

Reviewed by DELBERT D. THIESSEN

The author, Robert Ardrey, is a playwright, a scientific historian, and resides in Rome. He left his involvement in science after graduating from the University of Chicago in 1908 to become a successful playwright. He later returned to the study of man, finally writing the provocative African Genesis and, subsequently, The Territorial Imperative.

The reviewer, Delbert D. Thiessen, is Assistant Professor, University of Texas, Austin. His PhD is from the University of California at Berkeley and he works in the area of behavior genetics, and has a strong interest in the evolution of behavior, including territoriality. He has just been awarded a Career Development Award from the National Institute of Mental Health.

THE over-riding theme of this book is that man, like his phylogenetic neighbors, marks out and defends ter-

ritories. He and others do this to satisfy the fundamental needs of geographical identity, social stimulation, and species security. All else follows, including the intensity of inward and outward animosity and the number of surviving offspring. According to Ardrey, this is our genetic fabric, and if we are to avoid self-extermination from the misconception that *might* rather than territorial *site* makes *right*, then we must attend to man's biological history and adjust our actions appropriately. The truth of this, says Ardrey, is evident whether we consider "home sweet home," the neighborhood "turf," or Vietnam.

Few biologists would quarrel with Ardrey that man's actions are intimately tied to his genetic past and are determined in much the same way as the Eskimo dog's in East Greenland, the gorilla's of the Congo or the gooney bird's of Midway Island. The dominant thesis is therefore welcome in a literary world where man is generally seen to have infinite degrees of behavioral freedom. The argument as presented, however, does not merit scientific endorsement. In fairness to the author, we must keep in mind that his is a personal inquiry designed to integrate a large body of information, to excite and provoke. Indeed his inquiry is extensive, ranging from Aristotelian thought on territoriality to the recent and sometimes unpublished field studies of primates. The chronology would delight any historian. His presentation, moreover, is daring, brisk and superbly written.

MUCH more is involved. This is ostensibly the first major coverage of territorial concepts since Eliot Howard's classic in 1920. Ardrey addresses himself to scientific questions, ruthlessly disposes of views contrary to his own and draws sweeping conclusions. It seems entirely proper, therefore, to criticize the book as a scientific contribution.

When this is done the book fails on several counts. The preoccupation with territory as the genesis of all other behavior inaugurates a host of conclusions of dubious validity. It is just possible that a more aboriginal response is reproduction and that area defense is sec-

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James L. McCary, University of Houston. 1967, 374 pages, \$8.50.

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ondary, rather than the converse. Moreover, territorial acquisition may evolve for a plurality of reasons (C. R. Carpenter lists 32). These serious matters are not discussed. It is doubtful that Ardrey's triangularity of identity, stimulation and security as determinants of territoriality is any more imperative than earlier instinctive typologies devised by William McDougall or William James, and at best is a gross simplification. Typological concepts in general are anti-genetic, despite their biological connotations, as they deny individual variation and preclude evolutionary change and adaptation. Much the same can be said of the strict dichotomy apparent in Ardrey's discussion of genetic and environmental determinants of behavior. No such distinction is unassailable, since it is obvious that all behavior is an amalgamation (however disproportionately) of gene action, developmental gradients and situational circumstances. Herein lies the escape from fatalism and the flexibility necessary for metagenesis.

ARDREY's arguments are so logically linked that to accept one is to accept them all. This is perhaps the greatest weakness of the book—it disallows contrary considerations. The best illustration of this is the insistence that individuals display altruism and often forsake their status and survival value for the good of the population. Most of the author's arguments either lead up to this conclusion or follow from it. Biologists generally reject this reasoning (exceptions include V. C. Wynne-Edwards). Rather, it is believed that the structure of society and species-specificities depend solely on actions compatible with the leaving of an optimal number of offspring (see arguments by J. A. Wiens and G. C. Williams). This is equivalent to saying that individual action can nevertheless sustain an integrated population. At the very least it seems necessary to assume that altruism is directed toward saving genes of relatives. It is unlikely that a genotype will trade its evolutionary potential for anything less than equivalent genetic recognition. Thus, a mother might sacrifice herself to save two off-

spring each of which . . . ity per cent of their genes with the mother, or she may expose herself to danger for one offspring if its chances for survival are at least doubled. Similarly the trade for grandchildren must be of an order of four, for cousins eight, and so on. Unless some relationship is posited for individual gene survival self-sacrifice becomes a hollow gesture with capricious regulation. Again, these serious matters are not considered.

Decoding what the book has to say is a problem of another sort. Science is often beauty but not necessarily the reverse. The beauty of this book might be reduced to fifty pages of unadorned and uncluttered science. Perhaps this much said, even with superfluities, is an achievement, if only the Disneyland clash between color and fact were not so agonizing. The usurping of operationalism for anecdotes and anthropomorphism leads to an inappropriate extension of mechanisms across species-specific barriers. As a matter of fact man does appear territorial, but one of his unique attributes is that he can cloak his territory around him and parade it anywhere.

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Man often continues to fight battles already won, and fails to see that the extent of his victory has created a new enemy more dangerous than the old: the hardest enemy to spot is one disguised as an ally.

—THOMAS GRIFFITH



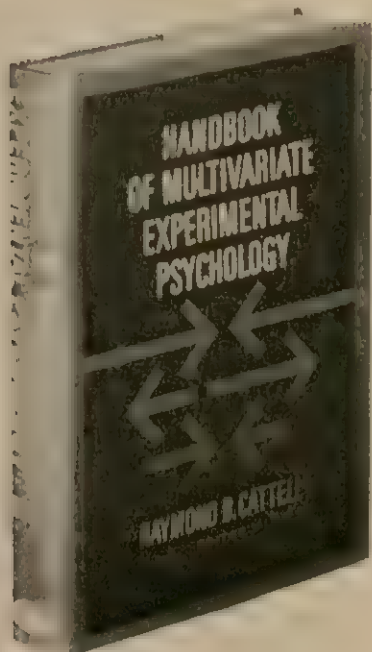
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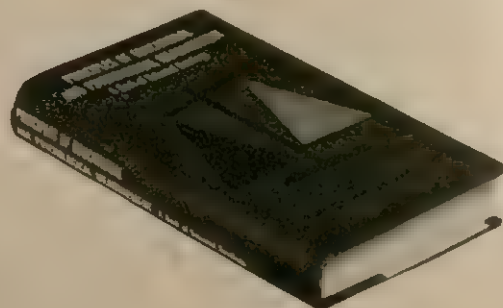
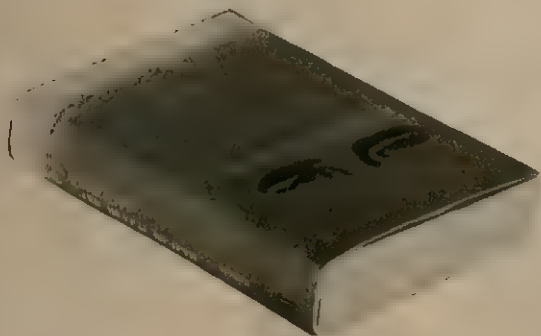
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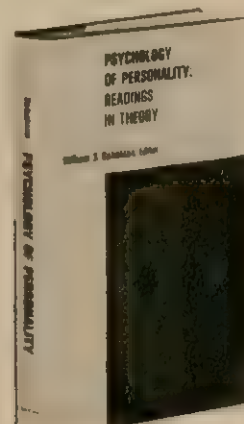
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Hawthorne Counseling that Failed

William J. Dickson and F. J. Roethlisberger

Counseling in an Organization: A Sequel to the Hawthorne Researches.

Boston, Mass.: Division of Research, Harvard Business School, 1966.

Pp. xviii + 480. \$10.00.

Reviewed by J. A. BROMER

The authors, William J. Dickson of the Western Electric Company, Headquarters Staff and F. J. Roethlisberger, Professor of Human Relations at the Harvard Business School are well known. Their earlier book, *Management and the Worker*, published in 1939, described the original Hawthorne researches. With Professor Elton Mayo they set a new trend in the study and interpretation of industrial organizations.

The reviewer, John A. Bromer, is Management Development Counselor at Lever Brothers Company. He is an industrial psychologist who started his career as a student of Paul Whitely at Franklin and Marshall and Harry Harlow at the University of Wisconsin.

THIRTY years ago, as a result of the Hawthorne Studies, the Western Electric Company established a counseling program which survived at Hawthorne for 20 years. This new book by William Dickson and F. J. Roethlisberger describes that program from its conception to its death.

In their re-examination of counseling the authors have applied the viewpoints of contemporary behavioral science. When it was established, counseling was seen as a source of information for management about the state of employee morale and as a source of research leads or hypotheses, as well as providing a service to the twenty thousand plus employees at Hawthorne. After a few years counselors were no

longer asked for information by management, nor did they see themselves as contributing to research planning and design. Thus, according to the authors, they failed to fulfill their roles as "change-agents," except through their direct, primary influence on those counseled.

But who was counseled, and with what results? It is a little hard to tell from the authors' analyses. Counselors at Hawthorne sought out the employees at the bench or work place, so some contact was had with most people in the areas to which counselors were assigned. Perhaps two-thirds of the plant population was served by counseling at the peak of the program. Of these, 40 per cent "had concerns that might be affecting their work." To carry the estimate further, nearly a third of those with such concerns, "seemed to be helped by counseling."

The nature of the problems discussed? About two-thirds of the concerns were work-related (see pages 70-72). Anxiety about personal relationships seemed to be involved in many work-related as well as "outside" concerns. "General personality disturbance" accounted for somewhat less than two per cent of employees-with-problems (p. 71).

PSYCHOLOGISTS and others in the mental health professions may wonder about the orientation of the Hawthorne counselors. Also about their selection and training. They were "non-intervening,"

in the sense that they did not take administrative action affecting individuals counseled, nor did they try to influence supervisory actions or decisions concerning their clients. Their bias was what later came to be called Rogerian (pp. 456-458). To achieve these results counselors were selected who were "interested in the daily lives and problems of shop people," "emotionally mature and self-reliant," "socially adjustable," and "understanding the function of counseling" (italics are authors'). How they were selected is not entirely clear, but evidently interviewing and observations by counseling supervisors, plus recommendations of other company managers were used. Counselors came from three sources: "(1) Younger men or women who were college graduates with a liberal arts background and in some cases with a major in the social sciences, (2) employees within the plant who were looking for a permanent transfer to counseling, many of whom had only formal education through high school, and (3) employees who came to the counseling organization on a rotational basis as a phase in their development, most of whom had little formal education and no training in the social sciences" (p. 365).

Candidates were trained through apprenticeship to a counseling supervisor. Actual experience was preceded by a period of indoctrination, which in the early years lasted a month. Later it was reduced to a week "because the counseling organization found that so many new counselors became so concerned about anticipating their first interview that they became nervous wrecks. So they were put in the territory almost at once and told to try to make their interview with the employee an interesting and rewarding experience for themselves as well as for the employee, to record their interviews, and to discuss them with the supervisor as soon as possible" (p. 366). A counseling relationship was established between the supervisor and the trainee which was "very intensive during the first six months" (p. 366). This relationship was supplemented with frequent group discussions among supervisors, counselors, and trainees, of readings, cases and problems encountered.

It is easy to scoff at the authors' apparently naive views concerning the professionalism of those engaged in counseling and psychotherapy. Yet there is no doubt that the Hawthorne counselors at best functioned far more effectively than the usual 'personnel counselor,' or the well-meaning supervisor who tries to help his people with their problems. The reader seeks almost in vain for a real confrontation of the issue of professional preparation. When it comes, it culminates in an emotional dialogue between one of the authors (F. Roethlisberger) and an imaginary proponent of a "perfect solution" (to the counselor's dilemma) (pp. 430-432).

This reviewer had an opportunity to attempt Roethlisberger's "perfect solution" (somewhat as described on p. 428) in a five-year (1948-1953) trial of client-centered counseling offered 11,000 employees of a large insurance company home office. Employees of all ranks, ages and both sexes came voluntarily to a center staffed by counseling psychologists and psychiatric social workers. There they received help—brief therapy, vocational or educational counseling or were referred to other agencies inside or out of the company as indicated. The uses to which these professionally qualified counselors were put were very similar to those described by Dickson and Roethlisberger, and the counselors were troubled by many of the same limitations described in the book under review. On the other hand, none of the problems predicted by the authors for professionals (pp. 428, 429) was substantiated. Employees in the insurance company *did* avail themselves of counseling services, in spite of appearing to be "problem-children." (Hawthorne employees, as a matter of fact, notified their supervisors when they were leaving the floor with a counselor.) Professional counselors very quickly learned what they needed to know about the 'culture' of the work place. They were probably no more inclined than counselors lacking professional qualifications "to make personality problems out of interpersonal problems—the very thing the counseling program was trying to counteract." We did not see ourselves abdicating any of the values that underlay the Hawthorne program.

Our experiment with the perfect solution, like the Hawthorne program itself, failed for several main reasons: (1) A counseling service inside a business organization violates the role-concept of people-providing-service-within-business that many employees and managers have in their minds; (2) It duplicates services that should and often do exist elsewhere in the community; (3) A truly client-centered service finds itself outside the hierarchical or organic structure of power and control of the organization.

ASIDE from becoming a force for social change, was there any other way in which counseling could have become more effective, or have survived longer? The authors stress the importance of developing closer working relationships with other service groups, such as personnel administration, supervisory training, or the medical department. The reviewer wonders whether similar attempts to cultivate support by the union, or by other groups of employees, might have had some effect.

Must the Hawthorne experience be written off as a total failure? Certainly not. Although industrial counseling failed in its change-agent role, it was related to movements which are having the most profound effects on the lives of all of us. These include the use of non-directive methods in psychotherapy, and of group-process methods of training in education and industry, both of which draw on the experiences and resources of all participants.

BUT enough of issues; what of the book itself? It opens with an excellent summary of contents. Chapter II, which describes the rationale of the counseling program and the role-prescriptions for the counselors, is thorough and thoughtful.

In the second main section of the book, the problems and concerns which employees brought to counseling are analyzed on a scale derived from Maslow's hierarchy of needs. Illustrative cases have been selected to show how problems were presented, dealt with, and either resolved or not resolved. The

reviewer must note that Chapter VIII, concerned with authority-relations, was disappointing because it failed to reflect at all adequately the behavioral researches of the last twenty years. Little attention is given to the concept of shared authority, for example. A "transactional" interpretation of employee motivation and responses to authority is recommended for supervisors wanting to improve their effectiveness as leaders but is so inadequately developed that it is of little theoretical or practical significance.

In the third section of the book the authors cite several cases in detail to demonstrate the difference counseling can make. It also contains a eloquent apology for the kind of counseling practiced by the best of Hawthorne counselors (pp. 275, 276). A careful reading of the counselors' responses suggests that Hawthorne counselors departed fairly freely from strict Rogerian principles.

The concluding section of the book deals with the organizational concerns of the counseling program. Of these we have already commented upon the most crucial. This section begins with a lengthy, pedestrian analysis of the place of counseling in the organization and ends on an elegaic note, in passionate defense of an ideal that was almost, but not quite, realized. Most readers will not share our authors' deep and genuine grief.

Summing up, this book is a passionate explication and defense of an ideal that most readers will not warm to and that the authors recognize has already become anachronistic. It is a useful historical source and an interesting example of an attempt to apply the insights of today to explain social phenomena of an earlier period.



A man who has been the indisputable favorite of his mother keeps for life the feeling of a conqueror, that confidence of success that often induces real success.

—SIGMUND FREUD



"Beautiful, just beautiful. The best book of its kind in the field."—Elliot Aronson, *Professor and Director of the Social Psychology Program, University of Texas*



FOUNDATIONS OF SOCIAL PSYCHOLOGY

By EDWARD E. JONES, *Duke University*; and HAROLD B. GERARD, *University of California, Riverside*. Emphasis on contemporary research . . . a sustained concern with methodology . . . and comprehensive coverage of *selected areas* in social psychology distinguish this stimulating basic text.

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In an unusually clear, systematically-developed exposition, the authors detail relevant experiments (after setting forth the necessary methodological groundwork) and carefully point up how individual experiments both answer certain questions and raise new ones. The reader is thus given a unique feeling of participation in the research process, as well as genuine insight into the nature of the social psychological experiment. The interplay between theory and data is consistently stressed, and the significance of each study is evaluated—not merely cited—and related to the ongoing conceptual unity. Results of post-World War II research are accorded prominence. The reader is introduced to some of the lively controversies currently existing in certain problem areas. 1967 743 pages \$8.95. *A Teacher's Manual is available.*

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By WALTER MISCHEL, *Stanford University*.

Offers a review of the empirical evidence for fundamental concepts and theoretical assumptions regarding personality. Social learning and cognitive principles are applied and extended to provide a thorough survey and conceptual integration of findings from basic personality research, personality assessment, and behavior change. Included is a thorough review of research on the consistency or specificity, on the temporal stability, and on the external correlates of major personality dimensions. 1968 Approx. 368 pages \$8.50

INTRODUCTION TO STATISTICAL ANALYSIS AND INFERENCE

For Psychology and Education

By SIDNEY J. ARMORE,
The George Washington University.

Provides a secure foundation in both descriptive statistics and statistical inference. The presentation is oriented toward psychology and education, and is particularly suitable for those who wish to study on their own. A Workbook, including sections on chi square and frequency distribution (not covered in the text), is available. 1966 546 pages \$8.95

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Edited by DAVID S. HOLMES,
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Pre-publication comments . . .

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This valuable new text brings together a series of papers that review, compare, and evaluate the large amount of empirical research done on some of the important aspects of behavior pathology. 1968 *In press*

MODELS OF THE NERVOUS SYSTEM

By SID DEUTSCH,
Polytechnic Institute of Brooklyn.

Describes simplified engineering models of the nervous system and brain to facilitate the study and analysis of complicated structures under investigation in neurophysiology. 1967 266 pages \$9.95

JOHN WILEY & SONS, INC. 605 Third Avenue, New York, N.Y. 10016

Laurie, Marcia, and Joey

Bruno Bettelheim

The Empty Fortress: Infantile Autism and the Birth of the Self. New York: Free Press, 1967. Pp. xiv + 484. \$9.95.

Reviewed by NICHOLAS HOBBS

The reviewer, Nicholas Hobbs, who has just spent a year at the Center for Advanced Study in the Behavioral Sciences at Stanford, is back in Nashville in the dual roles of directing the John F. Kennedy Center for Research on Education and Human Development at George Peabody College and of serving as Provost of Vanderbilt University. He tells us about the author, Bruno Bettelheim.

THIS is a work of great beauty, warmed by compassion, informed by years of experience, illuminated by an elegantly simple style. The subject is infantile autism, its origins and treatment. The author is surely among the most competent of clinicians to help us understand a strange and rare group of children. From 1932 to 1938, in Austria, Bettelheim cared for two autistic children in his own home. Later, in a German concentration camp, he experienced pressures that led to depersonalization in some of the adult prisoners, a condition he regards as analogous to autism in children. Finally, for over twenty years he has directed the Orthogenic School at the University of Chicago, a renowned residential center for the treatment of profoundly disturbed children.

Autistic children were first identified as a clinical entity by Leo Kanner in 1943. Beyond early onset, a diagnostic requirement, two characteristics most frequently reported are alienation from people and an obsessive need to preserve sameness in their environment. Because

autistic children are often mute, they are sometimes mistakenly regarded as deaf or mentally retarded, but their sensory apparatus is intact, and normal to superior intelligence is often evidenced. Indeed, special competences in memory, motor coordination, mechanical aptitude, or musical talent are often reported. The importance of autistic children exceeds their small number because their extreme pathology may help identify critical requirements for normal development.

Case histories make up more than half the book and account for its exceptional richness. Bettelheim states his theory of autism and then shows common threads in the lives and treatment of three seemingly different children. Laurie, age seven, pretty and well-groomed, was mute, anorexic, extremely emaciated, and almost completely inert. Gradually responding to the tenderest care, she became absorbed in tearing strips of paper and arranging other materials to create a magical boundary between herself and the world. After a year of rapid progress, she was peremptorily removed by her parents and regressed to her former, completely withdrawn condition. Marcia, almost eleven, was also mute although she managed to communicate overwhelming anger and fear. Out of touch with people and things, she responded only to her body, which she would allow no one to touch. Ritualistic finger twiddling dominated her behavior. In treatment for five years, she made remarkable progress, regaining the use

of language, contact with people, and appropriate expression of emotion but not full intellectual functioning. Joey, almost ten, was able to speak but unwilling to communicate. Completely absorbed in machines, he constructed complicated devices to ward off disaster: directing himself to imaginary sources of electricity to keep alive. His recovery, in nine years of treatment, was satisfactory.

These strange and different children had much in common. All three were cut off from other people, having erected elaborate, idiosyncratic defenses against personal intrusion and affiliation. All three were the first born of parents whose relationships were desperately strained, and they were unwanted, unloved by their mothers, yet all three had non-psychotic siblings. All had disturbances in bodily functions, especially in eating and eliminating, and in each instance the beginning of therapeutic progress, the long struggle for the birth of a self, occurred in relation to defecation, the feces permitting the first differentiation of self and not-self. Language development followed mastery of primary body processes. All made remarkable progress, an important support for Bettelheim's theory of autism.

BETTELHEIM accounts for the abnormal development of these children in psychogenic terms. While admitting that organic susceptibility is possible, that a child may be minimally responsive to his mother and thus trigger rejection by her, it is the massive rejection of the child by the mother that causes infantile autism. Autism is the child's radical defense against the mother's desire that he not exist. The achievement of selfhood is too dangerous to risk. The child erects a fortress against her wish for his destruction, but the fortress is empty, selfless. Kanner and Eisenberg generally favor the psychogenic position, emphasizing that parents of most (but not all) autistic children tend to be intelligent, cold, and obsessive. On the other hand, Bender regards childhood psychosis as a biological disorder, and the strained behavior of parents as a consequence of having to deal with an extraordinarily frustrating and disap-

pointing child. Rimland espouses the organic position, suggesting a specific location of the disorder in the reticular formation of the brain stem. Bettelheim, too, reaches for a specific explanation, adducing the concept of imprinting to account for a failure of development due to the absence of mothering at a critical period of development, but the parallel to classical imprinting experiments is at best heuristic. Sorely needed are longitudinal studies of children who manifest early adjustment problems, for we do not now have reference points for evaluating the effectiveness of treatment, even on the heroic scale of Bettelheim and his colleagues. Needed too is agreement on definition. Some of the differences in conception of etiology and treatment may reflect differences in diagnostic criteria, in the range of aberrant behaviors to be regarded as evidence of early infantile autism.

BETTELHEIM's rationale for therapy is consonant with his etiological conceptions. To overcome the tragic consequences of inadequate mothering, the counselors (two for each child) provide mothering of incredible devotion, tolerance, and sophistication. They strive to make it safe for a child to act, to commit himself beyond the boundaries of his private world, for in such encounters lie the seeds of self. Symptoms are not removed, either through conditioning or uncovering as in other therapies, but are regarded as points of transaction with the real world, to be built upon in a painstaking extending of the child's response repertory and of his awareness of being. Specifically, the counselor may, hour after hour, day after day, rock and feed a child, allow him to explore her own body, bathe him while he plays with his feces, or share obscure rituals with him, all to the end that the child may find enough love and safety, enough restitutive mothering, to dare to be born again. The heroes and heroines of Bettelheim's book, fully acknowledged as such by him, are the counselors who work with the children. Unhappily, though, the putative villains are the true parents of the child, against whom Bettelheim seems inappropriately and implacably hostile.

Now what of the validity of Bettelheim's ideas? It would be easy to criticize the contamination of theory and clinical observation, or to cavil at the frequent use of analogous and too-ingenuous explanations (the autistic child is attracted to spinning objects because he feels himself going in circles, etc.), and otherwise to fault the story, but these exercises hardly seem worth doing. Bettelheim's experience demands respect. He presents a coherent theory of infantile autism and brings theory to life with three fascinating studies, rich with instructive clinical observations. Other investigators must confirm or reject his formulations, in large and small.

More Questions than Answers

Theo Hermann (Ed.)

Psychologie der Erziehungsstile. Beiträge und Diskussionen des Braunschweiger Symposiums (28.3–31.3 1966). Göttingen: Hogrefe Verlag, 1966. Pp. 259. DM 19,80; 260 S.

Reviewed by THOMAS A. GLASS

The author, Theo Hermann, is Professor and Chairman, Institute for Psychology, Braunschweig Institute of Technology. He studied at Mainz under Albert Wellek. He assumed his present position in 1965 but has recently been invited to accept the Chair of Psychology at the University of Marburg as successor to Duker, who is retiring. His most recent book is Psychologie der Kognitiven Ordnung.

The reviewer, Thomas A. Glass, was Visiting Lecturer in Psychology, Universität des Saarlandes, Saarbrücken, Germany, a position he took upon receiving a 1966 PhD in clinical psychology at the University of Nebraska. His research interests center on socio-cultural

variables as they relate to personality development. His work in Germany has dealt with problems in cross cultural applications of American personality questionnaires to a German population. He is now on the psychology staff at Hawaii State Hospital, Kaneohe.

AN INTEREST in a better understanding of relations between adult and child behavior was the impetus for a four-day symposium in Braunschweig, Germany, during March 1966. Eighteen German psychologists participated in the symposium, a relatively new form of interchange in European academic circles. *Erziehungsstile* (literally, styles of education) can be best defined as patterns of socialization behavior. The emphasis is on child rearing and educational attitudes and practices as they influence child development.

The book contains the six papers presented at the symposium as well as the two prepared comments which followed each paper. Transcripts of portions of the informal discussion are also included. Papers in the following areas were presented: a) methodological problems, b) influence of social norms on parental child-rearing behavior, and c) influence of parent and teacher personality and socialization techniques on child development.

Clearly reflected in the papers is a shift from the theory-weak empiricism of past decades to better conceptual formulations and increased methodological sophistication. Participants repeatedly pointed out the inadequacies of theories which considered only single variables such as feeding and elimination practices as the primary independent variables. Outmoded methods were also rejected. For example, criticism was given to excessive reliance on self-report inventories and retrospective parental reports as sources of data. Several participants were particularly concerned with the absence of adequate multivariate experimental designs to deal with the complex interactions characteristic of parent-child relations. Ahrens proposes the application of certain multivariate statistical methods, such as Tucker and Messick's vector model for multidimensional scaling, as a means of differentiating between inter-

and intra-individual sources of variance in adult behavior.

WEAKNESSES in the book lie not so much in the inadequacies of the individual papers themselves but rather in the enormity of the task which the symposium set for itself. In this sense, the book does not deliver as much as the title promises. The emphasis in all papers is on a better understanding of relevant variables in adult behavior with little attention to the dimensions of child behavior. This was the case even though nearly all participants emphasized the importance of viewing adult-child relations as a reciprocal behavioral cycle. Children's responses, affected by adult behavior and in turn influencing subsequent adult behavior, can ill afford to be ignored. This concentration on aspects of adult behavior served the practical purpose of limiting the scope of the symposium but at the same time creates a difficult conceptual problem.

German psychology has often been described as being long on theory but short on data. The present volume is no exception in that German psychologists themselves have contributed very little of the data—85% of the references are to English language materials, mostly American. Nevertheless, some interesting cross-cultural comparisons are cited. For example, Jaide points out that socio-economic differences as they pertain to child rearing practices seem to be less useful predictors in Germany than they have been in the United States.

WHATEVER its shortcomings, this book reflects a noteworthy effort to achieve theoretical integration and systematization in a field which needs it badly. It contains a wealth of data as well, and presents one of the most up-to-date and comprehensive bibliographies (over 800 references) in the field of adult-child relations to be found in the current international literature. At the same time, the large number of references is somewhat misleading. There is a great deal of repetition and duplication among the references which are listed at the end of each paper.

Furthermore, the cumbersome arrangement of the references without spacing between them makes information retrieval by the reader laborious and time consuming. It might have been more effective to consolidate all references in one comprehensive list at the back of the book.

Although the editor has done little, aside from a very brief introduction, to help the reader evaluate the vast amount of material presented in this volume, his careful preparation and planning of the symposium proved fruitful. Draft copies of all papers were exchanged among participants before the symposium convened permitting discussants to prepare incisive critiques. The lively discussion which followed each paper reflects this preparation and serves to unify the book and underscore points of convergence and divergence in the participants' thinking. As a result, the discussion material itself constitutes as important a contribution to the book as any one of the prepared papers and adds immeasurably to what might have been gained by reading the papers separately.

Over-all, the book raises more questions than it answers and consequently offers little to parents or practitioners seeking a list of rules on how to rear children. By contrast, the student, researcher, and theoretician will find much of a stimulating and provocative nature. If the book is seen as an attempt to highlight and critically evaluate theoretical and methodological problem areas in adult-child relations, then it has made a singular contribution. It would indeed be sad if the language barrier prevented this book from finding a wide audience among American readers.



I hope the journalists, in future, when they speak of a 'dynamic personality' will mean a person who does what is least trouble at the moment, without thinking of remote consequences.

—BERTRAND A. RUSSELL



Hypnosis in Man and Beast

Ferenc András Völgyesi. Revised in collaboration with the author by Gerhard Klumbies

Hypnosis of Man and Animals: With Special Reference to the Development of the Brain in the Species and in the Individual. London: Balliere, Tindall & Cassell, 1966. Distributed in the US by Williams & Wilkins. Pp. xiv + 216. \$15.50.

Reviewed by ERNEST R. HILGARD

The author, Ferenc András Völgyesi, was in the private practice of psychiatry in Budapest until his death in 1967. His first book, written in 1920, is Place and Application of Hypnosis in Modern Medicine, and he wrote some ten more after that. He liked to participate in International Congresses and talked at the 18th International Congress of Psychology in Washington.

The reviewer, Ernest R. Hilgard, is Professor of Psychology at Stanford, where he has been for some years. He is author of Hypnotic Susceptibility and either author or co-author of some thirty research reports on hypnosis. His PhD is from Yale and he has occupied an influential role within psychology for more than thirty years.

IF you would like to know something about the history of animal hypnosis from 1646 to the present, and be entertained by 85 well-presented half-tones of animals in cataleptic positions (insects, crustaceans, alligators, frogs, hawks, storks, foxes, bears, lions, monkeys), this is your book.

If at the same time you would like to know what one very interesting psychotherapist learned in 50 years of practice with hypnosis on over 62,000 patients (attested by his records), then you have further good reading here. You will be entertained also by pictures of primitive medicine men practicing hypnosis, by Yogas, and by 37 additional pictures of modern human subjects il-

lustrating various phenomena and techniques of hypnosis.

The book also contains a great deal of psychophysiological and psychoneural speculation, adding another 20 pages of inserted pictures and diagrams of the nervous system. This is neither as interesting nor as instructive as the animals and the hypnotherapy, but it does tell us something about the author and his eagerness to keep abreast of the times and to understand the phenomena with which he deals.

The first German edition of Völgyesi's book appeared in 1938, and was revised with the aid of Klumbies (of Jena) in 1963; the present translation is of the second German edition, with some minor supplements by Völgyesi in 1966. There is a short chapter on problems of hypnosis by Klumbies, including a brief introduction to his "ablation hypnosis." The British psychiatrist, A. Spencer Paterson, writes an introduction to the English edition.

Völgyesi, a Hungarian who practiced in Budapest from 1918, was characterized by abundant energy, enthusiasm, sense of humor, curiosity about everything, and, even in his advanced years, well in touch with current developments. He corresponded with Einstein and with Penfield, whose localization diagrams he presents; he is acquainted with the Delgado's telemetry and McConnell's flatworms, and, of course, pays the necessary deference to Pavlov.

of transmitting the therapist's confidence and enthusiasm, without adding anything essential. He always tempers his enthusiasm with a certain amount of expressed doubts, so that he is not dogmatic even when some of the possibilities that he proposes are highly speculative and sometimes implausible.

All in all one comes away from the book fascinated by the experiences of this warm-hearted animal-lover and deeply human person, whose full daily schedule of treatment of the disturbed did not dim his curiosity, and did not prevent him from reflecting upon what he accomplished.

Prey and Predator in Central India

George B. Schaller

The Deer and the Tiger: A Study of Wildlife in India. Chicago: University of Chicago Press, 1967. Pp. 370. \$10.00.

Reviewed by HOWARD MOLTZ

The author, George B. Schaller, is Research Associate, Institute for Research in Animal Behavior of the New York Zoological Society and of Rockefeller University. He is author of The Year of the Gorilla and of The Mountain Gorilla: Ecology and Behavior. He is currently studying lions in Tanzania.

The reviewer, Howard Moltz, is Professor in the Department of Psychology, Brooklyn College of the City University of New York. He is a comparative psychologist who has worked on imprinting in ducklings and is currently at work on hormonal-experiential interactions underlying maternal behavior in the rat. His PhD is from NYU.

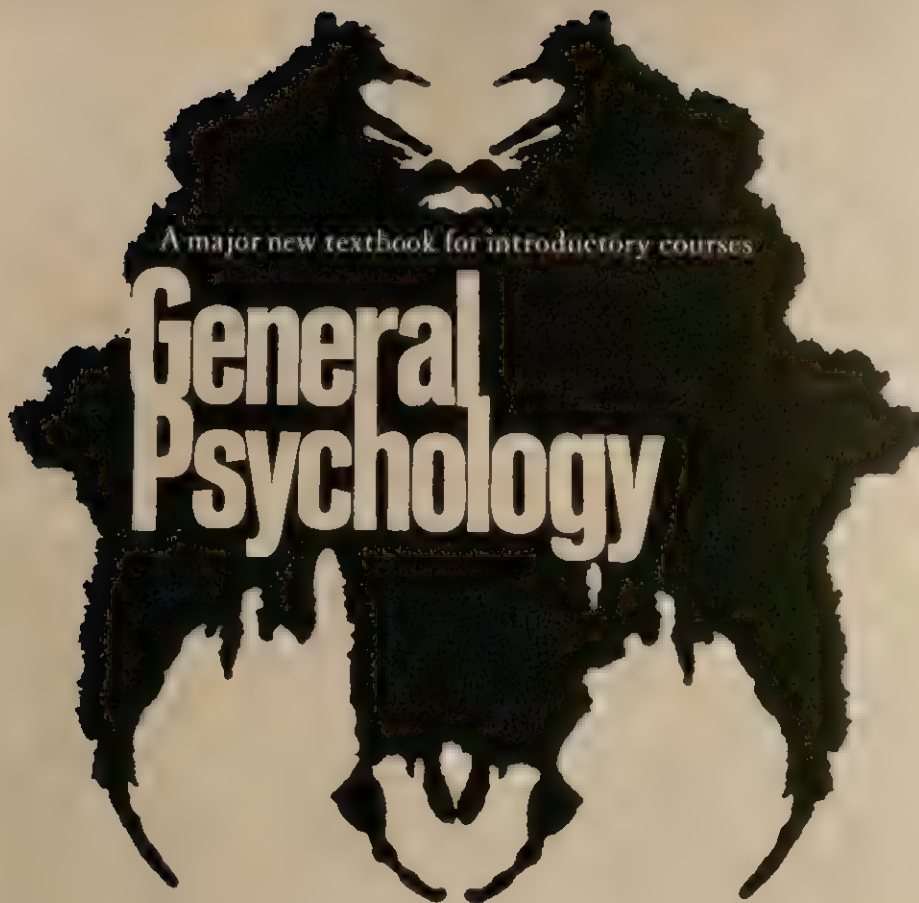
SCIENTIFIC OBSERVATION of free-living animals is an exacting pursuit, demanding skill, objectivity, and a high

measure of perceptiveness. It requires also a special kind of precision which, in its own way, is no less rigorous than that practiced in the laboratory. Unmistakably, *The Deer and the Tiger* meets these imperatives and, in so doing, makes a significant contribution to the literatures of both ecology and psychology.

Three species of deer—chital, barasingha, and sambar—and, in addition, the blackbuck antelope and the gaur, a species of wild cattle, all live in Kanha Park, India, along with the tiger, their major animal predator. In each case, Schaller discusses what is primary for species' survival: ecological distribution, feeding and drinking habits, and of particular interest to psychologists, social and sexual behavior. In a manner truly comparative, he also brings attention to the similarities and differences which exist among these animal groups with respect to both their ecology and psychology. And finally, he treats the effect of the tiger upon the population dynamics of its prey, in the broad context of prey-predator relationships.

But *The Deer and the Tiger* is more than a scientific report of unique scope. It is also a plea, oftentimes eloquent and moving, for the conservation and management of Indian wild life. The once ubiquitous tiger and the great herds of ungulates which yesterday roamed in "incredible numbers" are now at the edge of survival. Preyed upon by man as hunter and man as despoiler of forests, they appear to face final extinction, doomed to the fate of the cheetah and the Asiatic lion. The precious chance to study the behavior of these animals in the wild, to understand, for example, their territoriality and their agonistic and sexual displays is fast disappearing. Animals in zoos and circuses are very different from animals in mangrove swamps and evergreen forests. To preserve a species in what Schaller calls its "natural laboratory," requires not only human concern but also precise and extensive knowledge of its ecology and behavior. Both of these qualities are manifest in *The Deer and the Tiger*.

THE question remains whether or not this is an important scientific book. The answer must be that it is scientifically useful, but not scientifically definitive. The historical material on animal hypnosis is good, but not really up-to-date with respect to recent work, and his own work at the zoo is presented more as anecdote than as science. The efforts to understand hypnosis in man had led to a typology which cannot be considered to be established. His therapeutic success with a variety of disturbances cannot be doubted, but the basis of cure must remain unclear. The techniques themselves, including the "Faraday-hand," in which mild shocks are delivered to the subject through the therapist's hand, represent successful means



By David C. Edwards, Iowa State University

GENERAL PSYCHOLOGY provides a brief yet thorough introduction to psychology: its content, its terminology, and its methods. The treatment of material is concise, but its brevity does not diminish its comprehensiveness—the topic coverage in this book is equal to that of many longer volumes used in introductory courses. The reduced length is achieved by carefully selecting clearly useful topics and by avoiding unnecessarily elaborate exposition.

Terms, concepts, and principles are presented in a fashion that many students find convenient to study. Illustrations, lengthy examples, and discussions are presented only where they make significant points.

Modern in approach

The approach is modern and is concerned with psychology as a science of behavior. Science, in this case, is not narrowly identified with particular

methods, but as a broad collection of procedures which give useful information about behavior. The text is organized to flow from laboratory and data-oriented fields of psychology to the applied topics; from the simpler units to the more complex behavior patterns of men.

GENERAL PSYCHOLOGY is suitable for use in any introductory course, but by virtue of its length, it is especially valuable as a text for one-quarter or one-semester courses. It may be used in courses in which the teacher does not have time for a lengthy text, and does not wish to arbitrarily assign dissociated sections of a longer text. In two-semester courses, the text permits use of supplementary readings, a laboratory program, or participation in research projects. *A workbook is also available.*

1968, 384 pages, Illustrated, \$5.95

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THE MACMILLIAN COMPANY 866 THIRD AVENUE, NEW YORK, NEW YORK 10022

Contemporary Psychology, 1968, Vol. 13, No. 2

Four Texts for Students of Educational Psychology

Educational Psychology, Third Edition

By Glenn Myers Blair, R. Stewart Jones, and Ray H. Simpson, all of the University of Illinois

This successful textbook, now in its Third Edition, gives students and graduate teachers practical, up-to-date help in managing the learning process in keeping with sound psychological theory. It contains much new material—especially in the sections on teacher self-appraisal, the psychology of adolescence, the social psychology of teaching, and diagnostic and remedial procedures. Employing a developmental emphasis throughout, the authors examine the growth of the child; the use of psychological tools to evaluate educational programs; and some of the factors which influence the professional growth and mental health of the teacher. A Teachers Manual is available, gratis.

1968, 704 pages, \$8.95

Measurement and Evaluation in Teaching

By Norman E. Gronlund, University of Illinois

Designed primarily for elementary and secondary school teachers, this text presents with exceptional clarity the principles and procedures of the evaluation process. It is presented in the three stages: 1) identifying and defining instructional objectives in behavioral terms; 2) constructing or selecting evaluation instruments which most effectively appraise these learning outcomes; and 3) using the results to improve learning. Liberal use is made of sample test items and excerpts from evaluation devices. Administrators, supervisors, counselors, and teachers at any level will find the text useful.

1965, 420 pages, \$6.95

Readings in Measurement and Evaluation: Education and Psychology

Edited by Norman E. Gronlund

This collection of readings is designed to help students understand the basic principles of constructing, selecting, and using educational and psychological tests. It is intended for the beginning student in the field, and it requires no background in statistics. The articles were written by leading authorities in testing and about 80% of them were published in the 1960's. Especially useful is the Textbook Reference Chart which keys the readings to twenty leading measurement books.

1968, 416 pages, paper, \$4.50

Readings in Educational Psychology, Second Edition

Edited by Victor H. Noll and Rachel P. Noll, both, Michigan State University

This thoroughly revised collection of readings provides the student in educational psychology with a source of significant and relevant literature in the field. Twenty-eight of the articles are new and reflect a changing emphasis in educational psychology. The new articles include the writing of Robert C. Craig, Robert L. Ebel, Ruth Strang, Elizabeth M. Drews, and William Gnagey.

1968, 464 pages, paper, \$4.50

For examination copies, write the Faculty Service Desk,

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Some Strings of Experiments on Abnormality

James Inglis. Foreword by Joseph Zubin

The Scientific Study of Abnormal Behavior: Experimental and Clinical Research. Chicago: Aldine, 1966. Pp. xiv + 256. \$8.95.

Reviewed by NORMAN D. SUNDBERG

The author, James Inglis, is Professor in the Department of Behavioral Science, Temple University Health Sciences Center, and Senior Medical Research Scientist, Eastern Pennsylvania Psychiatric Institute. He has held positions at the University of London, Maudsley and Bethlem Royal Hospitals, and at Queen's University, Toronto. His 1958 PhD is from the University of London. His major writing task at the moment is the preparation of a chapter on memory disorder for a book being edited by C. G. Costello on Symptoms of Psychopathology for Wiley.

The reviewer, Norman D. Sundberg, is Dean of the School of Community Service and Public Affairs and Professor of Psychology, University of Oregon. He has a Minnesota PhD, an ABEPP in clinical psychology and is author with Leona Tyler of *Clinical Psychology: An Introduction to Research and Practice*. Currently, in his role of Dean of the New School of Community Services and Public Affairs, he is much involved in establishing programs applying behavioral sciences in a wide variety of areas from urban planning to mental health.

LIKE a collection of strings of beads, this book describes a series of experiments that have progressively explored selected abnormal phenomena. The strings make chapters on thought disorder, memory disorder, neurosurgery, sensory deprivation, reinforcement of behavioral and verbal changes, effects of psychotherapy, and methods for

studying the single case. Within each topic Inglis has chosen the work of one or a few individuals. Five psychologists account for 100 of the 350 references: Inglis, O. R. Lindsley, R. W. Payne, M. B. Shapiro, and C. B. Truax. The discussion is detailed by 60 figures and 59 tables.

The author's aim is a worthy one—to conduct the reader through the direct application of psychological research methods to maladaptive behavior rather than through the traditional accumulation of psychiatric and psychoanalytic description and theory. The content is not organized by diagnostic categories but by areas in which there has been psychological experimentation. Inglis even criticizes the behavior therapy movement for its concern with cure rather than the precise control of measured changes. Inglis emphasizes the value of bringing experimental and assessment techniques together, saying "in the study of abnormal behavior, change without measurement is blind whereas measurement without change is empty" (p. 230).

The author's choice to concentrate on a few topics can be criticized for omission of many significant studies, but it does have the advantage of helping the reader to understand a topic in depth and to apprehend the movement from earlier studies to later ones. Inglis presents at least a partial picture of the creative development of research problems, whereby one investigation raises questions which are pursued in another

study. The topical chapters are good reviews of problems, once one accepts the author's idiosyncratic rather than comprehensive strategy. Particularly noteworthy is the chapter on the study of the individual case: it whets one's appetite for a larger exploration of the problem, bringing in such considerations as P-technique, Cantril's ladder, and systematic life history methods with computerized simulation possibilities. Inglis takes several opportunities to assert, along with Skinner, that the study of a single case using careful measurement can elucidate more about psychological processes than group re-

BECAUSE of his intentional self-limitations, Inglis has omitted a very large part of the usual presentations of psychopathology. What has been omitted, and are the omissions important? Inglis skips many of the basic concepts taught in an introductory abnormal psychology course. The terms "sociopath," "psychopath," "psychosomatic," "addiction," "alcoholism," and "dreams" are not even indexed. The reader is nowhere given a sense of the whole field of abnormal behavior, nor an understanding of how things got to be the way they are. There is next to nothing on the social-clinical side—no community psychology, no feeling of how clinical psychologists and other professionals interact, not much of an image of the psychologist beyond his research role. With the exception of neurosurgery, there is little about the biological aspects of abnormality.

In his avoidance of theory and his concern for scientific respectability, the author overlooks many of the assumptions that underlie his work. For instance, he frequently expresses positive evaluation of manipulation and control of behavior; the implication is that he sees man as a mechanistic, reactive organism, and does not present the reader with other possibilities. In his concern for placing subjects in the laboratory, he fails to value the natural ecology, including the influence of the family and the community. Words like "role" and "family" are not in the book's index. In avoiding one tradition—the psychiatric—the author accepts another tradi-



THE BROAD SCOPE OF PSYCHOANALYSIS

**selected papers of
LEOPOLD BELLAK**

Edited by Donald P. Spence

The Broad Scope of Psychoanalysis comprises all of human behavior. This volume deals with psychoanalysis not only as a theory of psychopathology and a form of treatment, but also as a general psychology of personality.

This personality theory is stated in terms of the generally accepted propositions of science and as experimentally explored. It is a psychology which is capable of comprehending human experience ranging from the schizophrenic to the emotions involved in reading a detective story and the personality of Somerset Maugham.

For the clinical psychiatrist, papers on psychodynamic drug evaluation may be especially interesting. Other topics extend from systematic metapsychological presentations of cornerstones of psychoanalytic theory and technique to research into psychoanalytic concepts and processes. Virtually all the papers attempt to bridge the gap between experimental psychology and clinical psychoanalysis and psychiatry.

These are major contributions, carefully edited and annotated to give a clear picture of developing thought in the field. They offer information and thought-provoking stimulation not only to psychoanalysts, psychologists and psychiatrists but as well to many other professionals concerned with the broad area of human behavior.

CONTENTS	Section I.	Some Basic Clinical Concepts
	Section II.	Research in Psychoanalysis and Psychotherapy
	Section III.	Some Applications of Clinical Psychoanalysis
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THE QUESTION also arises: "Who is the intended reader of this book?" Although not expressly stated, the impression is that it is to be an introductory textbook. With large supplementation by the professor, the book could be a good resource for important areas of research. But for most undergraduates the book would be deadly reading. There is too much detail and some technical terms are given little or no explanation. The principles guiding the studies could have been expressed much more succinctly with far fewer tables and figures. The book reflects a conflict over the wish to present research in depth and the avoidance of a lengthy coverage of methodology, including statistical concepts. The author rather often gets into complex studies which leave the reader in the dark, slightly illuminated by small parenthetical explanations. The moments of enthusiasm and excitement are rare in the book; an exception is in the treatment of Truax's studies which are interpreted as offering a rapprochement between client-centered therapy and reinforcement theory. For graduate students, or some advanced undergraduates, the book could be very useful. It is almost like a book of readings—illustrations of research on selected problems. The author's concern with showing how a researcher moves from one research problem to another is of genuine assistance.

In summary, Professor Inglis has contributed to the gathering movement to make abnormal psychology experimental. He has had spotted success in his aim "to explore a mystery rather than to support a dogma" (p. 11). The title is too broad. There is much more to "scientific study" and to "abnormal behavior" than this book presents. As with any book, if the reader's preferences coincide with the author's, he will find this volume very useful. Even if their preferences do not coincide, many readers will find a worthwhile striving toward an organization of research in this significant field.

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FOUNDATIONS OF ABNORMAL PSYCHOLOGY

Edited by Perry London, University of Southern California, and David Rosenhan, Educational Testing Service, Princeton, New Jersey.

This multi-authored text deals with positive abnormality as well as traditional psychopathology. Its aim is to examine abnormality from the vantage point of what is known in general psychology of personality, child development, and genetics. Authors include Hirsch of Illinois, Maher of Brandeis, Kagan of Harvard, Zigler of Yale, Treisman of Oxford, and Ashby of Illinois. *January 1968, 656 pp., \$9.95. Manual of Test Items*

INFERENTIAL STATISTICS IN THE BEHAVIORAL SCIENCES

By Sheldon G. Levy, University of Michigan.

In a reversal of the traditional approach to this subject, this text *begins* with several concepts of inferential statistics. Descriptive statistics is brought in only as is necessary to continue the inferential argument. There is a full development of the relationship between the abstract world of mathematics and the real world. *February 1968, 288 pp., \$7.95 (tent.). Workbook, 112 pp., \$2.50 paper (tent.).*

TOWARD A CONTEMPORARY PSYCHOLOGY OF INTUITION A Historical, Theoretical, and Empirical Inquiry

By Malcolm R. Westcott, Vassar College. Foreword by Jerome Bruner, Harvard University.

This is the first book by a psychologist devoted to a detailed study of intuition. It offers a conception of intuition in terms of contemporary psychological theory and data, and presents the result of more than ten years of empirical research with children and adults. *March 1968, 224 pp., \$6.95 (tent.).*

SOCIETY, PERSONALITY, AND DEVIANT BEHAVIOR: A Study of a Tri-ethnic Community

By Richard Jessor, Theodore Graves, Robert C. Hanson, and Shirley Jessor, all of the University of Colorado.

The authors report the development and subsequent testing of an interdisciplinary theory of deviant behavior - especially heavy alcohol use - in a small, rural community. The three ethnic groups in the community - Anglo-Americans, Spanish-Americans, and Indians - are characterized by markedly different rates of problem behavior occurrence. The authors employ a field theory approach to behavior, showing it to be a consequence of the interaction of factors in the personality and in the sociocultural environment. *February 1968, 512 pp., \$7.50 (tent.).*

THE STUDY OF PERSONALITY: An Interdisciplinary Appraisal

Edited by Edward Norbeck, Douglass Price-Williams, and William M. McCord, all of Rice University.

Here is the first truly interdisciplinary summary and appraisal of developments in research and theory on the nature and formation of human personality. Distinguished scholars from the fields of psychology, anthropology, sociology, and psychiatry have contributed papers summarizing their knowledge in a style readily comprehensible to non-specialists. A final chapter by Margaret Mead appraises progress, discusses problems, and makes suggestions for the future. *April 1968, 384 pp., \$8.00 (tent.).*

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EXPERIMENTAL DESIGN IN PSYCHOLOGICAL RESEARCH, Third Edition

By Allen L. Edwards, University of Washington.

For students who are familiar with elementary statistical analysis and algebra, this text provides the necessary guidelines for setting up experiments that will produce reliable and valid results. *April 1968, 448 pp., \$8.95 (tent.).*

SOCIAL CLASS, RACE, AND PSYCHOLOGICAL DEVELOPMENT

Edited by Martin Deutsch, New York University, Irwin Katz, University of Michigan, and Arthur Jensen, University of California, Berkeley.

These articles focus on the environmental determinants of behavior. The overall purpose of the book is to present a balanced, objective exposition of the research dealing with the so-called nature-nuture problem, particularly as it impinges on the issues of social class and racial differences. Sponsored by SPSSSI. *April 1968, 352 pp., \$7.00 (tent.).*

CONTEMPORARY THEORY AND RESEARCH IN VISUAL PERCEPTION

Edited by Ralph Norman Haber, University of Rochester.

Complete and up-to-date, the readings on visual perception in this collection provide enough depth on each topic so that the student and the specialist can see not only some examples of data, but also some of the controversial issues and problems that are still present. *April 1968, 832 pp., \$12.50 (tent.).*

SYSTEMS AND THEORIES OF PSYCHOLOGY, Second Edition

By James P. Chaplin, University of Vermont, and T. S. Krawiec, Skidmore College.

This edition features new chapters on learning theory, verbal learning, and physiological theories of behavior. It includes the recent discoveries by MacNichol and others on retinal processes; recent studies of creativity, studies of environmental stimulation and deprivation, and Carl Roger's self theory of personality. *April 1968, 480 pp., \$7.95 (tent.).*

THE EXPERIMENTAL DESIGN OF SENSORY BEHAVIOR

By John F. Corso, State University of New York, Cortland.

An experimental approach to sensory psychology, this volume is designed to lead the reader gradually into the substantive core of experimental sensory psychology, and then into general behavioral theories. The author utilizes a selective and in-depth rather than eclectic treatment of his subject matter. *1967, 640 pp., \$12.95.*

CONTEMPORARY ISSUES IN DEVELOPMENTAL PSYCHOLOGY

Edited by Norman S. Endler, and Lawrence R. Boulter, both of York University, Toronto, and Harry Osser, San Francisco State College.

Utilizing the comparative approach, this collection of readings reflects the status of developmental psychology midway in the 7th decade of the 20th Century. *January 1968, 704 pp., \$9.95 (tent.).*



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Provocateurs and Prophets

Mitchell Cohen and Dennis Hale (Eds.)

The New Student Left: An Anthology. Boston, Mass.: Beacon Press, 1967. Pp. xvi + 339. \$1.95.

Mervin B. Freedman

The College Experience. San Francisco: Jossey-Bass, 1967. Pp. xviii + 202. \$7.50.

Nevitt Sanford

Where Colleges Fail: A Study of the Student as a Person. San Francisco: Jossey-Bass, 1967. Pp. xx + 229. \$7.50.

Reviewed by DOUGLAS HEATH

The editors of *The New Student Left*, Mitchell Cohen and Dennis Hale, are both 1966 graduates of Oberlin College, where they edited *The Activist* student-owned magazine and were members of *Students for a Democratic Society* and the *Congress of Racial Equality*. Cohen is a graduate student in political science at the University of California, Berkeley, and Hale is a graduate student at the New School for Social Research in New York City. Mervin B. Freedman, author of the second book, is Professor and Chairman of the Psychology Department, San Francisco State College. He received his PhD from the University of California, has taught there, was Coordinator of the Mary Conover Mellon Foundation at Vassar, has spent a year at the Center for Advanced Study in the Behavioral Sciences, a Fulbright year at the University of Oslo, has worked in the Center for the Study of Human Problems and as Assistant Dean of Undergraduate Education at Stanford. Nevitt Sanford, author of the third book here considered, after having directed the Center for the Study of Human Problems, is now Professor of Psychology at Stanford University. He is co-author of *The Authoritarian Person-*

ality, editor of *The American College*, and author of *Self and Society*.

The reviewer, Douglas Heath is Professor of Psychology at Haverford College. His 1954 PhD is from Harvard University. He is author of *Explorations of Maturity*, a developmental theory of maturing. Almost finished is *Maturing in College* and he is also involved in designing a major study on reactions in survivors to different types of expected and unexpected deaths and the determination of the relation of mental health to type and duration of the grieving process.

THE young authors reported in *The New Student Left* and the "over thirty" authors, Freedman and Sanford, are radicals whom no one should read unless he is ready to be profoundly disquieted. Radicals? We know students of the New Left like Hayden, Carmichael, and Savio intend to transform American society into the utopia of its historic dreams. But Freedman and Sanford? Like the authors of the New Left, they too seek to provoke, to persuade, to prophesy, to prescribe. Their books are not scholarly monographs tightly tied to data. Rather, they are reflective prob-

ing essays, dipping into empirical studies to support their points of view. They are radical in their style because, in these days when it is not quite "in" to be other than cool, aseptic and detached, both dare to write directly out of strong conviction. They are radical because they challenge psychologists to requestion some established assumptions about personality development and educators to recover a more humanistic conception of their educational mission.

A common theme unites all three books. Each is profoundly discontented with the direction and quality of American society and its principal socializing agent for change—the educational system. They speak the same words about the psychological demands that American society, reflected in its educational policies and practices, is making that produce in students despair and alienation from themselves and their society: formalism, academicism, specialization, intellectual and social prematurity, competitiveness, impersonalism, self- and communal fragmentation.

Cohen and Hale's anthology brings together the more significant writings of the authors of the New Left. These young authors, many just out of college, are exquisitely articulate and perceptive in their criticisms of foreign policy, racial, and educational practices and policies, though at times one would like some consideration that there may be some good about American society. The New Left is long on goals, painfully short on specific programs, embarrassingly and seemingly naive in its faith that human beings both desire and have the capacity for radical change and self-renewal. Discouraged by its fruitless skirmishes to change the entrenched political and economic powers supporting racial segregation and the Vietnam war, the New Left has shifted much of its energies to the reform of the university and its bureaucracy. By changing society's socializing agent, it hopes to change society. It is just such student demands, though not only from those of the New Left, for more participatory responsibility in their own educational programs that give both Freedman and Sanford hope that faculty will be more open—actually, be more pushed—into serious educational change.

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528 pages 1967 Paper \$4.95

THE EVOLUTION AND GROWTH OF HUMAN BEHAVIOR. Second Edition

NORMAN L. MUNN

This text deals with the evolution of human psychological processes and their growth and decline during an individual's life. Included among the topics most extensively revised for the second edition are recent findings in genetics relating to behavior; animal and human intelligence; basic factors underlying motor and perceptual development; and the influence of early childhood experiences on later personality trends.

594 pages 1965 \$8.95

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But how is change to be brought about and for what purpose? Freedman and Sanford provide some psychological underpinning to the faith that man can change himself and his society self-consciously. Freedman takes the more swashbuckling polemical route of clearing out false assumptions about man's capacity to change. Sanford seeks more restrainedly to reconceptualize the developmental process out of which to induce the educational goals and means necessary to help students adapt to the demands of an increasingly technological society.

BOTH Freedman and Sanford accept Allport's psychological heresy that man has the capacity to renew and change himself continuously. Freedman denies the psychoanalytic truism that the direction of development is basically fixed by the age of six, the Bloom thesis that growth levels off and stabilizes by early adolescence, and the widely shared view that little personality change can occur in young adults—let alone in those over thirty! Freedman asserts late adolescence is the time of high readiness for change, that—again in contradiction to much folklore about post-college regression effects—may persist into later life. In the process of working out this basic thesis, Freedman attacks other widely held truisms: that late adolescence is necessarily a time for emotional upheaval marked primarily by an identity crisis, that sexual impulses are as salient sources of conflict and motivation for the young as the psychoanalysts have claimed, that there has been any significant increase in sexual license since World War I, that the vast majority of young people are any more politically involved than they were several decades ago, and that educated women are not content with their current status as women.

It is blasphemous, of course, to question, for example, the ubiquity of the identity crisis. So we must ask what is the quality of Freedman's evidence? On this score, Freedman (as well as Sanford) is irritating. Many of his generalizations do make intuitive sense to those who have worked primarily with healthy rather than clinical samples. But his

argument would have been more convincing if he had had closer contact with the studies on student development at Sarah Lawrence, Harvard, the thirteen colleges of the Chickering group, and the current Carnegie sponsored review of all the student development studies. Freedman bases his book almost exclusively on the Vassar studies of the fifties, a similar study at Stanford, and a few other peripheral ones. His book would be better titled "Implication of the College Experience of Vassar Women." On the other hand, the book does contain much astute insight about such problems as student sexual morality, rebelliousness, and authority relationships.

IF it is so that human development is not as fixed and predetermined as psychological dogma has long held, then what promotes such continued growth and openness to change? For Sanford, there are two conditions: the readiness for change and challenges sufficiently strong to disrupt adaptation but not intense enough to provoke unconscious defensive reactions. The failure of many colleges to produce significant personality growth is not that the young adult does not have the potential for continued change, but that the colleges have failed to provide the right type of challenges to their students.

Sanford's concern is that American colleges are losing their power to change students because they are narrowing their conception of their educational mission. Their historic humanistic and generalist tradition is being replaced by the competitive and specialized interests of the university faculty. Colleges fail, and increasingly so, because they are no longer educating for individual development, for "such qualities as flexibility, creativity, openness to experience, and responsibility" (p. 9). Their goal should be to develop a "mature and informed personality" (p. 40).

Students sense they are being trained to become less a person than they could become, that they are no longer "at the center of the college's activities" (p. xiv), and of faculty concern. Could not one message of the authors of the New Left be that they feel betrayed by their faculties who do not provide

models of a way of life adequate for the kind of emerging technological age in which they must live? The professors have been seduced by an alien culture that rewards them for even doing—like research grants and consulting trips—but not for educating students.

BUT what does it mean to develop "the individual as a whole" (p. xv)? Sanford seeks to ground this primary educational goal upon a functionalist theory of development whose specific trends seem to be induced from the changes he earlier found in the Vassar studies. That is, a powerful college challenges its students to develop "self-knowledge in depth," social responsibilities and loyalty to non-authoritarian ideals and groups, academic achievement, creative understanding and expression. But why these particular trends rather than others? Perhaps studies of other powerful colleges will reveal additional types of growth? What justifies Sanford's vision is more his obvious experience, perceptiveness, and wisdom than a closely reasoned and validated set of developmental principles. His vision is compelling because of its eminent good sense and obvious need, not because of the adequacy of the psychological data and theory from which it may have been induced.

Sanford is also concerned about establishing an educable environment. He illustrates how policies about alcohol, sexual behavior, and the role of the teacher, might be developed that have integrative effects for personality development.

All three books, particularly Sanford's, deserve to be read widely and then acted upon. Cohen and Hale confront us with the New Left, its impassioned criticisms and hopes as well as its verbosity and humorlessness. Freedman and Sanford take us further. They use, but go beyond, their psychology to speak out about a central issue of our society—for what should we educate our youth? Would that more scientists of comparable experience and wisdom would challenge us with their prophetic visions about the central social issues of our time.

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Psychosis Diagnosis: The Grass is Scrawny Above the Old Mine

Christian Astrup, MD and Kjell Noreik, MD. With an Introduction by Joel Elkes

Functional Psychoses: Diagnostic and Prognostic Models. Springfield, Ill.: Thomas, 1966. Pp. xix + 176. \$9.50.

Maurice Lorr (Ed.)

Explorations in Typing Psychotics. Oxford/New York: Pergamon Press, 1966. Pp. vii + 241. \$9.25.

Reviewed by DAVID FREIDES

The authors of the first book, Christian Astrup and Kjell Noreik, both have their MD's from the University of Oslo, and both are senior psychiatrists at Gaustad Hospital, Oslo. Astrup has studied and researched at University Clinic, Leipzig; Maudsley Hospital; Institute of Higher Nervous Activity, Moscow; Pavlovian Laboratory, Johns Hopkins; and at Jewish Hospital, Brooklyn. The editor of the second book, Maurice Lorr, received his PhD from the University of Chicago and is Chief of the Psychiatric Research Laboratory of the Washington, D. C., VA Hospital.

The reviewer, David Freides, describes himself as a clinical, clinical psychologist, who feels at home with basic research and experimental psychology. This comfort must somehow be tied up with an internship with Roy Schafer and dissertation writing with Frank Logan at Yale in the mid-fifties. After a three-year Army stint, noteworthy for an opportunity to teach child development, he spent eight years in the Children's and Adolescent's Services at Lafayette Clinic in Detroit, where technical skills were honed while the kids forced his attention toward brain-be-

havior research, perceptual processes, and family interaction. He now teaches and does child clinical psychology, and research on individual differences in perception, and is working on nosology in behavior disorders. All this at Emory University where he is Associate Professor.

THESE BOOKS report research on the classification of psychotic behavior. Both are animated by dissatisfaction with current knowledge. Both are in the naturalistic empiricist tradition, assuming that data will fall into meaningful configurations and yield answers lurking out there. Both emphasize methodology and both systematically examine much data on many patients. They differ in that the work by Astrup and Noreik is European, psychiatric-diagnostic and follow-up in design while the volume edited by Lorr is American, behavior-descriptive and measurement oriented.


Astrup and Noreik followed 706 (out of 766) consecutive psychotic first admissions to a Norwegian psychiatric hospital after five or more years. Sixty-six percent were examined personally. The rest were evaluated on the basis of

secondary information. The patient's status at follow-up was rated on a five point scale ranging from "covered" to "severe schizophrenic deterioration." This measure of outcome was related to information obtained at admission such as ratings of various kinds of symptoms, diagnosis according to different classificatory schemes and social and life history variables.

The results, presented in 64 tables, largely confirm previous findings, e.g., the association of the symptom of "emotional blunting" or single marital status with later schizophrenic deterioration. There follows a report on the development of "prognostic models." By means of multiple regression, weights were computed to maximize the predictive power of several variables considered jointly. Although at least 19 such models were generated, the authors do not specify how variables were chosen to go together. The results for the main study are compared with data obtained earlier by similar methods (and at times with even more recent data) as a means of cross validation. On the whole, the findings are quite consistent. Nevertheless, the authors express disappointment that they can account for only 50% of the outcome variance.

The conceptualization of the study is straightforward and the outcome measure about as unsophisticated as can be. Given the choice of problem and this kind of approach, the work appears technically to be reasonably up to standard in the light of the realities of the conditions which inevitably prevail. However, Astrup and Noreik conclude by suggesting that psychophysiological variables might be better prognosticators. This "grass is greener" conclusion is rather surprising considering the amount of effort devoted to munching in the old pasture.

THE volume edited by Lorr is a sequel to *Syndromes of Psychosis* by Lorr, Klett, and McNair, (*Contemporary Psychology*, 1966, 11, 172-174). There are three brief introductory chapters by Lorr on the history of taxonomy and its problems and seven research papers by Lorr and others. These are studies on the Inpatient Multidimensional Psychi-



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STATISTICAL THEORIES OF MENTAL TEST SCORES

By Frederic M. Lord and Melvin R. Novick,
Educational Testing Service. With contributions by
Allan Birnbaum, *New York University*.

This book is in the Addison-Wesley Series in Behavioral Science: Quantitative Methods, Frederick Mosteller, Consulting Editor.

In recognition of the increased dependence of test theory on relevant mathematical models, this comprehensive treatment is based on the statement and development of these models. The primary goal of the book is to sharpen the ability of the reader to interpret mental test data and to construct and use mental tests as instruments of psychological theory and as tools of selection, evaluation, and guidance. Although the major emphasis is on theories of the measurement of and inference about psychological traits, the book surveys those aspects of prediction theory which have proven of obvious relevance to testing applications.

The book contains a separate yet integrated contribution by Allan Birnbaum of his work in latent theory, including his logistic response model.

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HANDBOOK OF MEASUREMENT AND ASSESSMENT IN BEHAVIORAL SCIENCES

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Intended to constitute an engaging treatise in a fast developing and expanding area of study, this book discusses the most timely techniques and applications of quantitative measurement. The book is divided into two parts. Part I, *Measurement Statistics*, emphasizes technical aspects; Part II, *Applied Areas*, illustrates the application of techniques to problems in the several disciplines. Individual chapters, written by some of the best known writers in the field, cover such topics as mathematics models, factor analysis, measurement of personality, and the evaluation of decision making.

508 pp. 33 illus. \$14.95

HANDBOOK OF SOCIAL PSYCHOLOGY, Second Edition

Edited by Gardner Lindzey and Elliott Aronson,
both of *The University of Texas*

The second edition of this advanced textbook is designed to present a detailed and integrated picture of the current status of social psychology. Individual chapters are written by recognized authorities in the areas they treat. These volumes are intended to be useful as undergraduate and graduate texts, and as references for professionally trained social scientists.

Volume I: *Systematic Positions*—In press 1968. c. 672 pp. 24 illus.

Volume II: *Research Methods*—In press 1968. c. 816 pp. 36 illus.

Volume III: *The Individual in a Social Context*—

In press 1968. c. 816 pp. 19 illus.

Volume IV: *Group Psychology and Phenomena of Interaction*—

In press 1968.

Volume V: *Applied Social Psychology*—In press 1968.

FUNDAMENTALS OF BEHAVIORAL STATISTICS

By Richard P. Runyon and Audrey Haber, *C. W. Post College of Long Island University*

Specifically intended for a first course in statistics for students in the behavioral sciences, this sophomore-junior text treats the basic elements of descriptive and inferential statistics. The last four chapters include such advanced topics as analysis of variance and the power and power efficiency of a statistical test, as well as several of the more widely employed non-parametric tests of significance.

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Text: 304 pp. 42 illus. \$6.95

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THE SIGN OF
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atric Scale (a schedule of 75 rating scales dealing with observed behavior and reported experience which are completed by an experienced examiner following a brief clinical interview), on the ten syndromes derived by factor analysis of the scale data, and on the typology derived by means of a form of cluster analysis of profiles of factor scores. The research program consisted of step by step pursuit of many relevant issues. Diagnostic types derived from large samples were cross checked against each other, males against females, acute patients against chronics, interview data vs. observations of ward behavior vs. reports of informants in the community. The results show large and promising areas of consistency as well as (anticipated) inconsistencies. No startling new typologies emerge but reasonably consistent, behaviorally distinct groups are found which offer the hope of more reliable classification on a symptomatic basis. Personally, I was intrigued by the breakdown of the paranoid group into four different behaviorally specifiable types. On the other hand, from 29 to 60% of the cases studied were not classifiable in one or another of the studies undertaken.

NOTWITHSTANDING the achievement that each book, in its own way, represents, both leave this reader with a predominantly negative reaction. Partly this is due to a strong bias in favor of journal publication of research reports. The more unassuming journal format is commensurate with the incremental advances made by these studies and precludes temptation toward huckster claims on the dust jacket and fatuous prefatory endorsements. (The C. C Thomas publication's sins along these lines are outrageous.)

However, the real focus of criticism is not the dust jacket, but the empiricist *modus operandi* animating both works. Here we have an emphasis of methodology and the minimization of measurement error and who could quarrel with that? Alas, if the variables chosen for study are off target, methodological improvements shine up fool's gold. With regard to research strategies in psychopathology it is no longer radical to as-

sert that the old mines have been exhausted and that some new lode must be found if riches are to be struck. Yet amidst the panoply of computers and technical innovation, conceptions of psychosis in these volumes are old hat. The emphasis is on symptoms: the static disease trait, *sans* development and *sans* ecology. Both enterprises were limited from the start by this traditional perspective.

The point is vividly illustrated by the contrast between the reliability and validity chapters in the Lorr volume. The former enthusiastically reports substantial success, whereas the latter has little to say and the tone is one of disappointment. The limitations of old conceptions are apparent again when the typologies derived from single evaluations are put to the test of repeated measurement. Although Rice and Mattson report marked changes in psychotic types over even so short a period as six weeks, there is no examination of the idea of a "type." Rather, the discussion emphasizes ways of measuring "change types" and out-of-phase changes. Similar comments are even more applicable to Astrup and Noreik. Not once do they cross-plot any two of their variables or consider relationships among them in any way other than the linear regression model. Yet among the variables they chose to study, complex interaction may well offer powerful analytic possibilities.

Despite my negative evaluation, I am well aware that the bootstrap operation that constitutes research has its ironies and I would not be too surprised if a creative approach to the puzzle of psychosis were to make some use of an instrument such as Lorr's. Meanwhile, these books are for researchers and students of research in psychopathology.



There are upright men whose conscience is so tranquil that one cannot approach them without sharing in the peace which radiates from their hearts and discourse.

—CHATEAUBRIAND



I Think You Think I Think...

R. D. Laing, H. Phillipson, and
A. R. Lee

Interpersonal Perception: A Theory and A Method of Research.
New York: Springer, 1966. Pp. x
+ 179. \$4.75.

Reviewed by N. L. Gago

The three authors, R. D. Laing, H. Phillipson and A. R. Lee, have been associated with the Tavistock Institute of Human Relations, London, England. Laing and Phillipson are still there but Lee is now associated with the Mental Health Research Institute, Palo Alto, California, and is also engaged in private practice. Laing is author of *The Divided Self: The Self and Others: Sanity, Madness, and the Family* (with A. Esterson); and *Reason and Violence* (with D. Cooper).

The reviewer, N. L. Gago, has been engaged in research on interpersonal perception since the early 1950's and is currently concerned with experimental attempts to change one person's perception of another person's perception of the first person; that is, studying the effects of feedback of one person's ratings to the person rated. He does all this at the Stanford Center for Research and Development in Teaching where he is Professor of Education and Psychology in the School of Education, Stanford, and Co-Director of the Center. His PhD is from Purdue.

THIS BOOK contains a theory, a method, and an instrument for the study of how two persons perceive each other. The basic idea can be seen in the instrument, which contains sixty items, each with three sections, each section requiring four-choice responses ("very true," "slightly true," . . . , "very untrue") to four statements. Thus, Item 1, Section A, reads as follows:

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A. How true do you think the following are?

1. She understands me.
2. I understand her.
3. She understands herself.
4. I understand myself.

In Section B, one answers as one thinks the other person would, i.e., gives his "meta-perspective." In Section C, one indicates how one thinks the other person would predict one has answered, i.e., gives one's "meta-metaperspective." Thus, 1-B-1 asks, "How would SHE answer the following? 'I understand him,'" etc. And 1-C-1 asks, "How would SHE think you have answered the following? 'She understands me,'" etc. In all, the respondent makes 720 responses, taking about 70 minutes, on the average, to do so.

Obviously, when the responses of a husband (H) are compared item by item with those of his wife (W), it is possible to derive a number of dyadic measures. Of the many possibilities, the authors consider (a) agreement (e.g., H_A vs. W_A), (b) understanding (e.g., H_A vs. W_B), (c) realization of understanding (e.g., H_C vs. W_B), and (d) feeling of being understood (H_C vs. H_A). For example, the technique can show that, on a given statement, two persons disagree, but each understands the other, that is, knows they disagree, while one fails to realize that the other understands this, whereas the other realizes that the first does understand.

The authors compared in great detail the average responses of 12 disturbed and 10 nondisturbed married couples. They found that on agreement, understanding, agreement plus understanding, agreement plus misunderstanding, etc., the averages of the two groups differed in directions that made psychological sense.

ON the face of it, the authors seem to have developed an ingenious and sensible way of measuring psychological relationships between two persons. But they have ignored the work on interpersonal perception by their many predecessors in this field—Cronbach; Tagiuri; Bronfenbrenner, Harding, and Galloway; and Hastorf, to name only a few. So

they have proceeded in innocence of various substantive and methodological issues, such as the effects of consistent individual differences in tendency to respond in a socially desirable way, and the need for testing the efficacy of monadic variables before resorting to explanations involving dyadic variables. Their detailed 38-page analysis of the responses of one married couple proceeds without reference to the dangers of bogging down in a morass of artifactually interlocked variables. In short, the sophistication laboriously developed by previous workers is disregarded in the present enterprise.

But the main problem is whether these so-called perceptions, meta-perceptions, and meta-metaperceptions, although they can easily be defined logically and operationally, actually exist psychologically, or phenomenologically. Do these variables actually make a difference in non-test, or real-life, behavior? It may be that we are incapable of handling more than one pair of reflections in these facing mirrors. That is, the infinitely regressing images of our images may be functionally nonexistent after one or two spirals of this kind. If so, the authors are playing with mere logical possibilities rather than significant psychological events.

The authors' general approach has some promise. There may indeed be something useful to be learned from detailed analysis of two persons' responses to questions of this kind. But those potentialities will be realized only by taking into account the contributions of previous workers and by careful application of established techniques for the validation of psychometric and clinical instruments.



... it is a mistake to suppose that the difference between wisdom and folly has anything to do with the difference between physical age and physical youth.

—GEORGE BERNARD SHAW



Young John Dewey

John Dewey. Edited and with a Foreword by Joseph Ratner

Philosophy, Psychology and Social Practice. New York: Capricorn, 1965. Pp. 315.

Reviewed by ROBERT CHIN

John Dewey needs no introduction to CP readers.

The reviewer, Robert Chin, is Professor of Psychology and Research Associate at the Human Relations Center, Boston University. His PhD is from Columbia University and he feels that his interest in the results of Dewey's thoughts on education—the emergent social practitioner roles—makes this volume of concern and why he was asked to review it.

THE latter part of the title of this book was the title of Dewey's presidential address to the APA in 1899, an essay worth the price of the volume and which should be required reading for all of us. In this essay, the teacher is used as an example of a practitioner, who has to abstract from the concreteness of the situation, see the pupil as "object" and "mechanisms," define his own relations to these processes and identify the influences operating upon the mechanisms.

Sixteen articles hitherto only in journals are now available in this reprint of Dewey's earliest articles, pre-Columbian and pre-Chicagoan, accompanied by the well known "Reflex Arc Concept in Psychology" and the "Interpretations of the Savage Mind," both previously published in book form. While Ratner, a long time student of Dewey's thought, has selected publications prior to 1902 to show the emergence and development of his philosophical thought, a movement from a "variety of Hegelian Absolute Idealism" to a philosophy that became the most comprehensive and influential in the history of American culture, he also shows Dewey developing psychology. In 1884, the year of his doctorate degree at the age of 25, Dewey was writing on the "New Psychology," which

he saw as being brought about by the attention to detailed fact, the integration of the cradle and the asylum as the laboratory, the individual's integration into social life, the rise of physiological psychology, not just for its facts but more significantly for its method—"What can be meant, then, by saying that the rise of this physiological psychology has produced a revolution in psychology? This: that it has given a new instrument, introduced a new *method*—that of experiment, which has supplemented and corrected the old method of introspection."

The conception of organism in biology "has led to the recognition of mental life as an unitary process developing according to the laws of all life, and not a theatre for the exhibition of independent autonomous facilities or a rendezvous in which isolated, atomic sensation and ideas may gather, hold external converse and then forever part."

Ratner's introductory essay quotes Dewey's autobiographical statement on the influence of an undergraduate course in physiology in Vermont, from which he developed a craving for a world and a life "that would have the same properties as had the human organism in the picture of it derived from a study of Huxley's treatment." Ratner also notes that Dewey's growth away from Hegelianism to his own system was influenced also by the publication of William James's *Principles* in 1890. Dewey struggles for almost 40 pages in "The Theory of Emotion" to bring into organic connection Darwin and the James-Lange theories of emotions.

Reading Dewey prior to his Chicago era is edifying and satisfying to watch the development of ideas that become important, to find the relevance of statements made there and then and useful here and now, and to identify intellectual turning points being made. Incidentally, does anybody know the concept of a *quale* (p. 55)?



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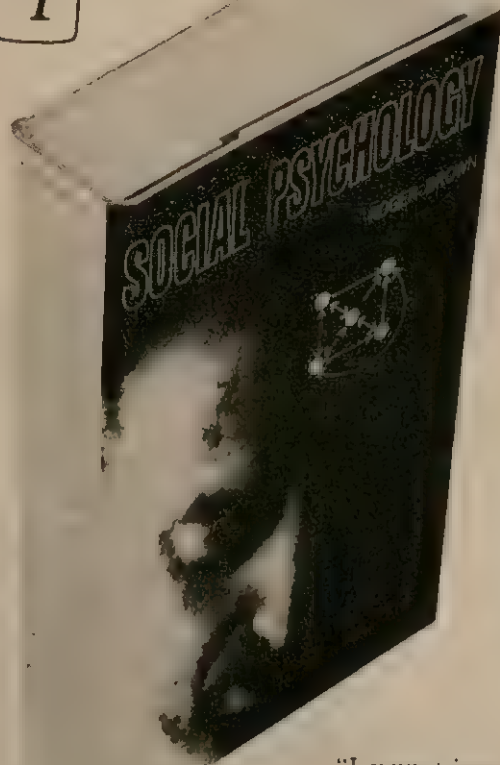
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Taxi Dancers, Gigolos, and Call Girls

C. H. Patterson

Theories of Counseling and Psychotherapy. New York: Harper & Row, 1966. Pp. ix + 518. \$9.75.

Reviewed by JOHN W. LOUGHARY

The author, C. H. Patterson, received a 1955 PhD from the University of Minnesota and since 1956 has been at the University of Illinois where he is Professor of Educational Psychology and Chairman of the Division of Counseling and Guidance. He has contributed widely to the literature of counseling psychotherapy. He is author of *Counseling Psychotherapy: Theory and Practice*. Recently he has been particularly active in the area of programs for counselor education.

The reviewer, John W. Loughary, is Professor and Coordinator of Research, Division of Psycho-educational Studies, School of Education, University of Oregon. He received a 1958 PhD in educational and counseling psychology from the University of Iowa. He has had both university and public school experience and for the last few years has been most active in potentials and problems in man machine systems. His publications include *Counseling in Secondary Schools and Man Machine Systems in Education*.

THE PHRASE, "points of view" rather than "theories" would have been more appropriate in the title, as the author acknowledges in the introduction to this carefully prepared and well organized volume. Patterson's purpose is to offer a "book (in the counseling field) which does what Hall and Lindzey do with *Theories of Personality* and what Hilgard does with *Theories of Learning* . . ." Fifteen chapters are each devoted to a "non-evaluative summary of a

theory as propounded by their originators or representatives," and the final chapter attempts to make some sense out of all that precedes. Each chapter concludes with a summary and evaluation section, representing Patterson's thinking. Patterson who rejects all attempts to define separately counseling and psychotherapy, achieves his purpose in spite of the several handicaps under which he had to work. Three of these are worth noting.

First, as the book documents so well, there isn't much counseling theory per se to summarize. To the extent that the points of view are theories in the scientific sense, they seem to the reviewer to be most concerned with accounting for the development of personality. Counseling theories should have more to say about how one goes about the business of counseling than do those included in this volume.

Second, regardless of their focus, most of the theories are unsystematic, as Patterson points out, and those that aren't tend to be almost unbelievable mazes of constructs, patterned apparently after models taken from the field of mechanics.

Third, and as Patterson notes also, while there is a large research literature concerned with counseling and psychotherapeutic theory, very little of it appears to have generated from counseling and psychotherapeutic theory. There is somewhat of a temptation therefore, not to take the various theories presented seriously.

This is not Patterson's responsibility,

however, and if a graduate course in counseling theory is to be taught, I know of no better basic text to use. One should note that the theory summaries were submitted to original authors or someone closely identified with the point of view, and all were accepted.

IF there is author bias in the book, it is Patterson's underlying belief that all could be well in the world of counseling theory—that apparently discrepancies and contradictions could be resolved—if only we could reach a higher peak and thus gain a better perspective. His final chapter represents an attempt to climb to such a vantage point, and there is a certain amount of excitement generated as one after another foothold crumbles under the pressure of examination. I found myself wanting to help—to find a new strategy, or discover a different route to the development and/or integration of counseling theories.

Safe in my armchair, a couple of ideas did occur. In spite of the theories, I assumed that there must be something to counseling, simply because so many people were involved in it, and even more clamoring to be admitted to training programs. Even if that is not a valid assumption, one has to admit that merely the existence of such a large and well organized club, offers considerable potential for some kind of social good. It would seem that if the scope or concern of theories could be reduced, communication would be enhanced. Perhaps counseling should not, at least at first, be concerned with all of man's behavior. Related to reducing the scope is the matter of greater specificity of language in theories. Some are like a science-fiction romance—there is simply no common point of reference.

FINALLY, in the pursuit of more useful counseling theory, it might be advantageous to hold off on certain basic assumptions—frequently stated as established principles. For example, Patterson writes, "There is an important implication of the complexity of the process and the importance of the therapist's interest, concern, and understanding. The process cannot be mechanized, rou-

tinized, simplified, or controlled in the sense of programming or objective, planned manipulation of rewards in terms of expressing interest, concern, etc. This is because the therapist's behavior is only effective when it is sincere and spontaneous, not when it is a contrived technique. The therapist is most effective when he is a person—when he is, as the client-centered approach terms it, genuine in the relationship." This kind of statement is bound to inhibit the development of theory, simply because there isn't any factual basis for it. There is, in fact, some evidence to the contrary.

And again, "The evidence seems to point to the establishment of a particular kind of relationship as a crucial element in counseling or psychotherapy. It is a relationship characterized not so much by what techniques the therapist uses, as by what he is, not so much by what he does as the way he does it." Apparently, you pay your money and takes your chances.

The book concludes with two questions. In one is the following statement ". . . therapy is, however, more than offering of friendship, at least in the usual sense of the word. While the viewing of psychotherapy as something dark and mysterious classifies the therapist with magicians and witch doctors, viewing it as bought friendship, places him in the same category as taxi dancers, gigolos, and call girls." I could not help but comment mentally, that at least the latter can describe their product, and observe whether or not those who purchase it are satisfied.

The latter group of practitioners performs its relatively simple tasks without the need of theory. Perhaps the same is true of counselors. Theory may *not* be critical for what is done now, but rather, is essential only if more complex tasks and accomplishments are pursued.



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Typologies and Peace Corps Chores

Morris I. Stein

Volunteers for Peace: The First Group of Peace Corps Volunteers in a Rural Community Development Program in Colombia, South America. New York: Wiley, 1966. Pp. xiv + 258. \$7.95.

Reviewed by RAPHAEL S. EZEKIEL

The author, Morris Stein, is Professor of Psychology, New York University and holds a research career award from NIMH. He received his PhD from Harvard University in 1949, has taught at Wheaton College and at the University of Chicago. He has authored *The Thematic Apperception Test*, *Methods in Personality Assessment* (with George Stern and Benjamin Bloom) and *Creativity and the Individual* (with Shirley J. Heinze) and edited *Contemporary Psychotherapies*.

The reviewer, Raphael S. Ezekiel, did graduate work at the University of Chicago and at the University of California, Berkeley, where he spent parts of two summers in Ghana aiding Brewster Smith in his study of Peace Corps teachers. His dissertation was on the relation of volunteers' time perspectives to their effectiveness in the field. His current research activities include values, time perspectives, and authoritarianism, and he is working with Herbert Kelman on a study of international exchange. He is currently Assistant Professor at the University of Michigan.

THE BOOK, *Volunteers for Peace*, is a slim, complex volume and one of the first to emerge from the considerable involvement of behavioral scientists in the Peace Corps venture; it is especially recommended to those interested professionally in the varieties of outcomes elicited when normal young

adults are offered an unusual form of engagement with the post-collegiate world.

Professor Stein became a consultant to the Peace Corps at a very early point in its development. He aided in screening the young men described in this work. These youths composed one of the very first contingents to go abroad, and initiated the Peace Corps' rural community development program in Colombia. Stein received a contract to study this contingent; the present volume is a report on that study, dealing with volunteer selection, the prediction of overseas effectiveness, changes experienced by the volunteers, and a number of observations on the nature and effects of the community development program.

I would like to consider the book from four perspectives.

FROM one perspective it is an account—a patient, lucid account—of selection and prediction. The focus here is a selection board that had to deal with those would-be Volunteers who reported for training. Stein attempts to uncover the grounds of that board's decisions (board sessions were not recorded) by relating decisions to the data that were available to board members.

The board performed two functions. It selected those who were to be allowed to continue past training to the field,

and it made predictions of success for those who were accepted. Stein shows that the two decisions were probably distinct and rested on different weightings of the material. A sense of the trainee's current psychological status was involved in both but was especially important in the first decision to reject or accept; job-related factors (such as ratings by instructors in Community Development or grades in Spanish) received less attention until the board felt secure that it had weeded out the frail and had settled down to estimate relative future effectiveness of those it deemed strong enough to send.

Stein next relates assessment variables to overseas effectiveness (as judged by supervisors in the field). Only two of the measures available at training proved themselves as predictors: 1) the prediction statement of the selection board and 2) ratings from references. (The effectiveness of letters of references in this instance may surprise those who are jaded by the application folders for graduate departments, but Stein's comments are suggestive and helpful.)

Why were there not more or greater predictive successes? Stein points out that the nature of the job at hand was relatively unknown and capacity in Spanish, which affected predictions, was over-valued. Moreover, and this he emphasizes, a variety of roles may exist in the field and a variety of personality types may fit these roles in differential ways.

FROM a second perspective, *Volunteers for Peace* can be seen as a primer on the Peace Corps, and a good one. In a brief, easily read volume, Stein deals with all major aspects of the Colombia project: the project's inception; how one applied for the project; how one was screened, trained and selected; what the job looked like; the results of a survey of Colombians who lived in the project villages; and how Volunteers felt the two years affected their lives. The volume covers almost any imaginable relevant question, and is an excellent introduction. Less happily, the writing lapses into a somewhat anecdotal style when it moves from the firm empirical base of the chapters on selection and

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prediction and the chapter on the survey of Colombian responses. Sketchy accounts of incidents are allowed to represent considerable areas of experience, and there are tales that suggest a single Peace Corps task and a way of performing that task rather than a family of tasks. The author's visits to the field probably left him able to discuss the project itself in more thoughtful depth than he has chosen to do in these pages.

FROM a third perspective, the volume is an important stage in Stein's development of a special strategy for understanding personality and assessment by working through typologies. He moves forward here with his conception that persons differ meaningfully in the organization of their motives, that "a man's personality is better reflected in the organization of his needs rather than in the intensity of his separate needs."

In the present case, he has asked each Volunteer to describe himself by assigning a rank to each of twenty paragraphs that "describes a manifest need or motivational factor in Murray's system of personality." Typologies arise by subjecting results on this Self-Description Questionnaire to a person-oriented (Q) factor analysis. Volunteers are assigned to five types.

Stein spends a paragraph or so describing each of these types in psychodynamic terms. These paragraphs are quite interesting, but their origin is unclear. What matters more, however, is the limited use made of the types thenceforward. There is an attempt to see how prediction with the variables at hand in training worked within each type and between types. But little is done to move toward examining the differential behavior of each type in the field. What were the distinctive perceptions, the responses to stress, the capacities to see challenge, of each type in the field? Were there not defenses and coping strategies that were the peculiar weaknesses and strengths of each type in the field?

This is probably the place to mention that Stein complements the system of Types with an extremely suggestive but scarcely developed system of Roles.

Again, little is made of this in the field, and again, there is little reporting of the experience in the field that led Stein to create the system.

FROM a fourth perspective, the book is a study of one or more of several processes. One could be talking about the process of community development, or the process of maturation and the development of competence that ensues when youths confront a challenging task in a setting of autonomy and support. Here I feel strongly that the volume has left room for further work because it slights the possibilities that inhere in looking hard and seriously at the experience in the field. One can look at persons, at settings, and at engagements. This book does ask: who are the people; what are the kinds of people at hand? But one also can ask: what are the settings; what are the conditions in different settings that make for different sorts of engagements by different sorts of people? And, finally, given the varieties of engagement with the task that result from the person-setting interactions, how do these impinge on the acting persons and upon the environments?

These several criticisms refer to work yet to be done, and should not obscure the value of the volume. It is a research contribution in an important sector of ego psychology and an exciting statement in the area of assessment. One is gratified by the unusual breadth of the survey aspects of the study. But the real pleasure of the book is watching Stein at work on his home grounds. The unusually honest writing allows a clear view of the author as he wrestles with a tough and unusual problem in assessment.



Freud found in the perennial Jewish character . . . the source of his personal integrity, his moral courage, his braininess—and, above all, his defensive attitude toward the world.

—P. RIEFF



Cross Cultural Growing Up

Yehudi Cohen

The Transition from Childhood to Adolescence: Cross-Cultural Studies of Initiation Ceremonies, Legal Systems and Incest Taboos. Chicago: Aldine, 1964. Pp. 254. \$5.75.

Reviewed by LAURA NADER

The author, Yehudi A. Cohen, received his PhD in anthropology from Yale University in 1953. He has taught at Columbia, Northwestern, and the University of Chicago. At present he is in Israel on an educational grant. He is the author of *Social Structure and Personality: A Casebook* and in 1955 he was awarded the Socio-Psychological Award by The American Association for the Advancement of Science for an essay entitled "Food and its Vicissitudes: A Cross-Cultural Study of Sharing and Nonsharing."

The reviewer, Laura Nader, is Associate Professor of Anthropology at the University of California, Berkeley. She received her PhD from Radcliffe in 1961 and has done field work in Mexico and in Lebanon. During 1963-64 she was a Fellow at the Center for Advanced Study in the Behavioral Sciences. She is author of several articles, a monograph, and is editor of a special issue of the *American Anthropologist*, "The Ethnography of Law."

THE BOOK, *The Transition from Childhood to Adolescence*, is about the ways in which 65 societies handle this transition. This period (characterized by biochemical and cultural change) is considered crucial to the way in which society fashions identity and forms the desired boundary-maintaining systems. Yehudi Cohen is contrasting two societal types: the first is described as stressing sociological independence—"the individual's sense of responsibility is to his own nuclear family rather than

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to his community or to his kinsmen outside his nuclear family." The second type is characterized as valuing sociological interdependence—an individual's sense of responsibility (and identity) lies "as much with his community of kinsmen (his descent group) outside his nuclear family as it does with his nuclear family." His criterion for establishing a society as valuing sociological independence or interdependence are the notions of legal liability that are present. Sociological independence is established by individual liability, sociological interdependence by joint liability.

Cohen argues that a society training its young for sociological interdependence will employ the customs of brother-sister avoidance or extrusion during the first stage of puberty (8-10 years). A society training for sociological independence will not have these patterns at the first puberty stage. Sociological interdependence is a necessary but not a sufficient precondition for initiation ceremonies, the second stage of puberty. Statistical and descriptive evidence is presented to verify the postulated connections.

Several intriguing statements are made by Cohen: "The patterns of identification that have been instilled in a child for the first seven or eight years of his life—regardless of the society in which he is being reared—are relatively weak; they have not developed out of any crisis within the child or out of any exigency in relation to the family in which he lives" (p. 64-65). Of the two stages of puberty he states there is more confusion during the first rather than the second (presumably because bodily changes are not observable), and further, since brother-sister avoidance and extrusion appear more frequently in his sample than the second period initiation ceremonies, he concludes that initiation ceremonies are less significant and less important than the first for implanting values and attitudes. Furthermore the impact of the first period ceremonies are greater than the second because the duration is longer. Where is his evidence? The further argument that initiation ceremonies are briefer than those of the first period because the labor of the young is needed, only more clearly points to the differences in "type cus-

tom" being analyzed. Brother-sister avoidance and extrusion and initiation ceremonies may not all be part of the same system of functions.

COHEN then discusses the incest taboo as a response to an innate need for privacy, and as a boundary-maintaining mechanism, and argues that the "climatic establishment of the incest taboo is achieved by the same means that are used to establish a social-emotional anchorage and a sense of identity. In societies in which children are being brought up for sociological interdependence, the incest taboo will be given its final inculcation by extrusion and brother-sister avoidance, or both" (p. 191). These two chapters on the incest taboo are the least well thought out, and summaries of his cross-cultural data are not conveniently presented as in previous chapters.

Cohen devotes his final chapter to methodological issues. He describes sample selection and data evaluation, and notes that he has disagreements with several studies of initiation ceremonies in terms of theory, concepts, and methodology. Here he only discusses his technical disagreements which basically revolve around the use of the Human Relations Area Files. Cohen believes the HRAF are useful; however, because of the way they are categorized they are not equally useful for all problems. He chides John Whiting for orienting his formulations "almost exclusively to the Files," rather than turning to the complete ethnographic reports (as Cohen did here). Cohen does not mention that the complete ethnographic reports are included as part of the HRAF for anybody's use, nor does he seem to realize that sophisticated users of the Files (Whiting included) never rely exclusively on the Files.

The complexity of the subject matter in part accounts for the lack of organization in this book. The author deals with subjects which have a traditional place in anthropological theory but the work of others is not systematically treated. It is, however, disconcerting for an author to discuss his subject matter in book form assuming that the reading public either will already know the con-

text of the polemic or not be interested in related or contrary .

As a contribution to method this study does not measure up to Cohen's best work. As a stimulating and exciting "non-book" it is first

Response Set, Revisited and Revised

Irwin A. Berg (Ed.)

Response Set in Personality Assessment. Chicago: Aldine, 1967. Pp. xi + 244. \$6.75.

Reviewed by JACK BLOCK

The editor, Irwin A. Berg, is Dean of the College of Arts and Sciences and Professor of Psychology, Louisiana State University. He received his PhD in 1942 from the University of Michigan and has taught at the University of Illinois, Pomona College, and Northwestern University. From 1955 until recently he was Chairman of the Department of Psychology at LSU. He is author with R. A. Bennington of *Introduction to Clinical Psychology*.

The reviewer, Jack Block, received his PhD from Stanford University and since then (1950) has been at the University of California, Berkeley, where he is now Professor of Psychology. He has published a small book on response sets and admits having conviction in this area. He has also written a small book on the Q-sort procedure and is at present completing with Norma Haan, *Ways of Personality Development, a longitudinal study of 171 individuals studied over 25 years*.

OVER the last ten or fifteen years, the major concern of the field of personality assessment has been with the issue of response bias. Although earlier recognized as affecting personality measurement, it was only when vigorous protagonists of attractively sim-

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ple response styles came along that such factors in assessment were viewed as of fundamental significance. In the zero-sum assessment game, to the extent response sets were proposed as important, the role of content necessarily had to be diminished.

There was a strong reaction against this energetically espoused viewpoint and so the debate was joined—and continues to this day. *Response Set in Personality Assessment* contains a series of statements delivered in February, 1965, by the prime movers of the controversy—Edwards, Jackson, Messick, and Berg—on their respective response sets as viewed by them. In this rapidly changing field, these position papers already seem somewhat antedated but remain of interest, nevertheless, because they have not been superseded elsewhere.

Edwards presents a stately, well-organized summary of the logic of the social desirability hypothesis and the empirical evidence consistent with his view. No new extensions of his position are presented, and indeed, various qualifications and constraints are introduced which make the SD variable less sweeping in its implications. Edwards continues to advocate his SD scale as a sufficient, if not necessary, basis for predicting scores on MMPI scales loading heavily on the first MMPI factor.

Jackson and Messick are concerned with various conceptions of acquiescence, with ways of controlling for acquiescence bias, and with ways of fitting the data of other investigators into an acquiescence framework. Acquiescence now is a can of worms. As viewed by Jackson and Messick, acquiescence sensitively interacts with content and with other sources of variance; it no longer is conceptualized as a straightforward individual difference variable even within one measurement domain. Specification of the nature of these various interactions apparently is a task for the future and, for the present, no clear and direct marker variable for acquiescence is put forward.

For many, the complications Jackson and Messick invoke to preserve the concept of acquiescence will be discouraging because originally, much of the attractiveness and power of the acquiescence concept lay in its simplicity.

But what is the meaning and the usefulness of acquiescent response style when a newly emphasized construction of the concept asserts acquiescence can as well be measured by saying *false* as by saying *true*? Further, these later proposals cause much that has been construed in the past as evidence for acquiescence to become suddenly irrelevant or embarrassing. My own impression is that we will not see much research energy devoted in the future to these newer, fragmented conceptions of acquiescence.

Berg's Deviation Hypothesis has been of lesser influence than SD and acquiescence, primarily because its implications were non-directive of research and, for many, are not surprising. In essence, the Deviation Hypothesis asserts that when two groups of individuals from different populations are contrasted with respect to any large, heterogeneous pool of inventory items or tasks or decisions or what have you, a goodly number of the elicited responses will, via item analysis procedures, prove to discriminate the two groups being compared. In these computer times, there is no arguing with the value of brute-force scanning procedures as a tactic for research and the furthering of understanding. The term, "hypothesis," however, suggests a theory and therefore the label, "Deviation Hypothesis," may be something of a misnomer because it neither derives from a conceptualization nor does it propose a conceptualization of the data it causes to be processed.

The symposium begins with some balanced and circumspect remarks by McGee and is appropriately closed by Pepinsky. Only those psychologists presently cathecting the response set controversy will be strongly interested in this book.



You are here to enrich the world, and you impoverish yourself if you forget this errand.

—WOODROW WILSON



Research Under Stress

Wayne H. Holtzman, John F. Santos, Susana Bouquet, and Peter Barth

The Peace Corps in Brazil: An Evaluation of the Sao Francisco Valley Project. Austin, Texas: University of Texas Press, 1966. Pp. vi + 309.

Reviewed by JOSEPH WEITZ

The senior author, Wayne H. Holtzman, is currently Dean of the College of Education and Professor of Psychology and Education at the University of Texas. At the time the Brazilian project was undertaken he was Associate Director of the Hogg Foundation for Mental Health. He has co-authored *Ink Blot Perception and Personality* and *Tomorrow's Parents*. John Santos is currently Chairman of the Psychology Department at Notre Dame. At the time of this project he was Research Psychologist with the Menninger Foundation. His PhD is from Tulane. Susana Bouquet is Coordinator of the Latin American Program of Great Lakes Colleges Association, Antioch College. She lived most of her life in Brazil, Mexico, and Cuba. She has her PhD in social psychology from Columbia. Peter Barth is a Brazilian psychologist and did much of the interviewing in the Brazilian communities.

Joseph Weitz has worked both in an academic setting (Tulane University and Carnegie Institute of Technology) and also in industry (Associate Director of Research at the Life Insurance Agency Management Association, Director of Research at Richardson Bellows Henry and Company). He was on the final selection board for the Peace Corps group which went to Colombia. At present he is Professor of Psychology and Research Professor of Management Engineering, NYU.

THIS BOOK is a description of a research project designed to identify promising selection procedures for volunteers in the Peace Corps. It also describes various attempts to determine

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the effects of environmental factors on success or failure of the volunteer.

The reader will soon discover, if he does not already know, that doing this type of research in the field is not as easy as it sounds. All of us who have had the experience of doing research outside of the laboratory recognize the difficulties one is likely to encounter. But air crashes, natural catastrophes, and revolutions interfering with the execution of a proper research design is carrying Murphy's law (If anything bad can happen, it will.) a bit far. These are some of the obstacles which this research team had to face, consequently their initial research design was doomed. In spite of the fact that their original research plan was impossible, they do an excellent job of salvaging what they can.

Before actually reporting their findings in the way of predictions of field performance, the authors give the reader a chance to learn a good deal about the operation of the Peace Corps in Brazil, the effect of bureaucracy and unfulfilled promises on research designs, and a little about Brazil itself. It makes very interesting reading; however, I cannot believe the Peace Corps will be as intrigued as an outsider might be. The reason for this is that one discovers running through the description of the operation of this Brazilian project a consistent lack of planning, either on the part of the Peace Corps or the host nationals. One gets the feeling of the absence of direction from central headquarters to the extent that some of the volunteers found nothing to do in the villages to which they were assigned. A case can be made for a lack of initiative on the part of some of the volunteers but there was an apparent lack of preparation of the volunteers in terms of realistic expectations. Further, we find that the Brazilians were ill-prepared for the coming of the corpsmen with respect to knowing what the volunteers' activities were to be.

THE BASIC DESIGN of the study was to administer a battery of tests to the volunteers prior to their travel to Brazil, and to validate these tests against field performance as measured by ratings and

interviews. The predictors were varied, encompassing such measures as language grades in training, ratings by a selection board, projective devices (HIT) and standard personality tests such as the MMPI and the EPPS.

The criterion, as it will in all studies, caused problems. However, the researchers did what they could. They had planned to have a control group of villages but this fell through. They also hoped to make use of host national counterparts to the corpsman as a comparison group but this too was impossible. They were, however, successful in interviewing the volunteers and villagers at two different points in time (about five to six months after the corpsman had been assigned to a village and later toward the end of the volunteer's tour of duty).

The strategy used for validation was an initial factor analysis of the literally hundreds of predictor variables and then the techniques of multiple regression were employed to determine the best linear combination of predictor dimensions for each of several criterion dimensions. The authors present complete correlation matrices as well as tables indicating factor loadings of each of the predictors.

They obtain multiple correlations of .72 for predictors versus the intermediate criteria (first set of ratings) and .47 with the final criteria. If one test can be singled out as most predictive of later ratings it would be the Edwards Personal Profile.

It should be pointed out that there was no cross validation of any of these findings since the sample size prohibited this type of analysis. (Of one hundred and twenty-five initial volunteers only 59 finished their tour of duty.) The authors are aware of the shortcomings of their findings due to lack of cross validation and they further recognize the lack of generalizability of the findings; however, there was little to be done about it.

The findings are clearly presented and the results give one hope for the possibility of predicting performance of Peace Corps volunteers in the field. The reviewer is left with the feeling, however, that the Peace Corps should make some effort at establishing some

unified procedures for prediction and evaluation of the volunteers. With the experience reported by Stein (Stein, M. I. *Volunteers for Peace*. New York: John Wiley and Sons, Inc. 1966; see page 86) in his excellent book on the Peace Corps in Colombia, and now with the report on the Brazil project (and probably other reports on other projects) it should be possible to pull together a battery which has generalizability as well as validity.

Laissez-faire for Teutons

Reinhard Tausch and Anne-Marie Tausch

Erziehungspsychologie: Psychologische Vorgänge in Erziehung und Unterricht. Göttingen: C. J. Hogrefe, 1967. Pp. x + 374. DM 26.—; 348 S.

Reviewed by FRANK WESLEY

The authors, Reinhard and Anne-Marie Tausch, are husband-wife. They both are with the Psychological Institute of the University of Hamburg, Reinhard as Professor of Psychology and Anne-Marie as Research Associate. They both have had ten years of research on teacher-pupil society interaction and have produced over 20 major articles and books on the subject.

The reviewer is Frank Wesley, busy consultant for CP and Professor of Psychology at Portland State College. He is spending 1967-68 with the Laboratoire de Psychologie Génétique, Université D'Aix-Marseille, for more research in child development and comparative education.

AUTHORITARIANISM has been the concern of many educators. Tausch & Tausch attempt to make the German child less authoritarian. They approach this difficult task by showing that be-

havior follows scientific laws and is influenced by input variables. The teacher's behavior is considered a most important input variable, especially in Germany where the same classroom teacher stays with his class for the first four years of schooling or longer.

The authors cite many American studies (as for instance those of Adorno, Frenkel-Brunswick, Levinson & Sanford, H. H. Anderson, Axline, Dewey, Dreikurs, Haythorn, Lewin, Lippitt, Roger, Wispé, and others) to show the advantages of democratic relationships in social, educational, and industrial settings. Having done this convincingly they proceed to analyze present day teacher behavior pointing to the divergencies in democracy as portrayed in pedagogical texts, as expressed by teachers, and as practiced in the classroom. Reporting from one of their many studies in which the authors tape-recorded hundreds of teaching hours, they show, for instance, that during the average German instructional hour 3120 words are spoken by the teacher, 67 by the student. When asked for an estimate the German teacher believes he speaks only 258 words per hour.

By analyzing their various recordings Tausch & Tausch are able to present many more objective data. Conflict, for instance, is settled in the German classroom by pure laissez-faire methods in only 1% of the cases, by authoritarian solutions 94%. Teaching is interrupted by disturbing behavior 15 times per class hour. One wonders what a US count would be! Comparative figures are given in many other instances. The average German pupil, for instance, asks 2.2 questions per hour, the average American 7.3. The US teacher is found to be quieter, friendlier, more optimistic, and punishes less. He only scores equal with his German colleague in the category of "announcing" punishment.

Though the authors have presented a wealth of comparative data they have not postulated whether the German child can tolerate more authority because he starts school one year later, works with a more phonetic and hence a more structured language, and has several types of schools to fit individual differences. Also possible disadvantages of the non-authoritarian classroom have

not been discussed to the fullest, and one may wonder if there ever may come the need to restrict this import. But such concern is perhaps still much in the future.

AFTER having given rationally and empirically compelling arguments against authoritarianism in the first half of their book Tausch & Tausch use the second half to define and to teach non-authoritarian behavior. They do this by pointing to the many authoritarian statements actually made in the classroom and by rewording each statement to show how it can be more "socially integrative" and more "partner-oriented." In this vein several chapters and hundreds of examples are devoted to give workshop-like practice in non-authoritarian teaching. These chapters may be tedious for the American reader who does not need to be told that it is wrong to say: "I'll slap your face if this pencil falls down again," but right to say: "Where shall we put this pencil so that it will not fall down again?" The authors have no illusions. They realize that in Germany non-authoritarianism is still interpreted as softness, femininity, and uncertainty and that one can perhaps not be detailed enough to counteract such notions.

Tausch & Tausch's book gives the Germans many useful examples of non-authoritarianism. It gives the Americans many examples of objective evaluations of the teacher's classroom behavior. The Weimar republic, wars, and suffering have had as yet little influence in dispelling authoritarianism. Tausch & Tausch start with the teacher and the child. Their approach is very promising. May the Zeitgeist be with them!



The generations of men are like the leaves of the forest. Leaves fall when the breezes blow, in the springtime others grow; as they go and come again so upon the earth do men.

—HOMER



Emotions —As Perceived in an Eastern European Country

Jiri Diamant, Milan Černý, and
Vladimír Študent (Eds.)

Emoce. Prague: Státní Zdravotnické
Nakladatelství, 1966. Pp. 261.

Reviewed by JANE M. KRAUS

The editors are all clinical psychologists and psychiatrists at Charles University, Prague, Czechoslovakia. Dr. J. Diamant is at present in the United States for a year's study under the Exchange Program of Research Scientists. The individual authors are well known in Czechoslovak scientific literature.

The reviewer, Jane M. Kraus, worked as a college professor of psychology for eight years in Czechoslovakia until the Hitler regime. From 1945-48 she was a research psychologist at the Institute of Labor until she immigrated to the United States. Here she has worked as a research psychologist and has published with Molly Harrower. Since 1950 she has worked in the applied field as clinical psychologist and teacher, with special interest in the various approaches to emotion. She is Chief Psychologist, New Hampshire Hospital.

BOOKS dealing with the problems of emotions are not yet very common in the literature of Eastern European countries. In this respect this monograph, which is the first in Czechoslovak psychological literature, and which follows the more textbook-like Russian publication by P. M. Jacobson (*Psychology of Emotions*, Moscow, 1958), deserves reviewing.

The monograph is the result of the work of fifteen authors and has all the advantages and shortcomings of such collective work. The editors claim to present to the reader a survey of the present status of investigation in the problems of emotions. This very difficult aim is fulfilled to different degrees

in individual chapters, depending upon the availability or access to each author of the recent literature. There is no unique theoretical concept that would unify the monographs; the approach presented by the authors is both eclectic and positivistic, with several attempts at original classification (classification of emotions, methods of investigation of emotions, etc.).

The authors approach the wide field of emotions from the point of view of their own specialization; thus, relevant material from biochemistry, physiology, ethology, psychopharmacology, genetics, and biology are presented. In the first, more general section of the monograph, theories, semantics, classification, and methodological approaches to the study of emotions are discussed, with special reference to the possibilities of application of biocybernetics. The more practically oriented third part of the monograph presents the problems of psychopathology of emotions, describes their manifestations in behavior and deals with their psychosomatic and social relations. The problems of educational factors in psychotherapy of children and adults are presented at the end of the book.

THE following sections are especially stimulating, many suggesting new approaches to the study of emotion:

- 1) The classification of emotions according to their course and to the type of emotion-producing stimuli (Černý);
- 2) The classification of methodological approaches to the study of emotions with special reference to the classification of psychological methods (Diamant);
- 3) The conceptual framework for investigations of emotions in terms of biocybernetics, where emotions are considered as a specific biological form of elaboration of information (Wünsch);
- 4) An attempt to formulate problems arising from a comparative-psychological approach to emotions (Pinkava);
- 5) The differentiation of various aspects of emotions in the conceptual frame of personality (Diamant) and of the group (Knobloch);
- 6) A hypothesis about possible connections between emotions and activity in children (Fischer);
- 7) A comparison of different psychosomatic

schools with respect to the study of emotions (Haškovec); 8) An analysis of emotional factors in therapy (Horvai).

Many of these conceptions and hypotheses are the result of long-term team research and of the individual work of psychiatrists and psychologists who are members of the Psychiatric Clinic of Charles University in Prague and its Research Laboratory.

The main advantage of the book lies in the thorough consideration of the English, German, French, Russian, and Czech literature in an attempt to synthesize the products of Western and Eastern thinking. In this respect this monograph with 574 references is definitely a worthwhile contribution. On the other hand, the uneven quality and incompleteness of some chapters deprive the monograph of unity and profoundness. Thus there remain many things to be improved in later editions.

Ideal Role-Identities in Conduct

George J. McCall and J. L. Simmons

Identities and Interactions: An Examination of Human Associations in Everyday Life. New York: Free Press, 1966. Pp. ix + 278. \$7.95.

Reviewed by CHAD GORDON

Both of the authors are sociologists. George J. McCall received his PhD from Harvard's Department of Social Relations and J. L. Simmons received his from the University of Iowa. Both were at some time students of the late Manfred H. Kuhn. McCall is now Assistant Professor of Sociology at the University of Illinois and Simmons is Assistant Professor at the University of California, Santa Barbara.

The reviewer, Chad Gordon, is Assistant Professor of Sociology at Har-

vard University. His 1963 PhD was received with Ralph Turner at UCLA. His thesis research and several projects since coming to Harvard deal with relating self-conceptions to major life plans among adolescents, college students, and people about to retire. He has co-edited a book, now in press, *The Self in Social Interaction. Volume 1. The second volume is in preparation.*

IDENTITIES AND INTERACTIONS is a rich book, a banquet of ideas. As is usually the case with banquets, the general level of quality is quite good; if only a few of the offerings are exquisite delicacies, really unpalatable items are nearly as rare.

McCall and Simmons have set themselves two very comprehensive and difficult objectives: "... our enterprise in this volume is twofold: (1) to elaborate a theory of human conduct (the role identity model . . .) and (2) to explain the WHO, WHAT, WHEN, and WHERE of social interaction in terms of this characteristic 'social conflict' in which all a person's acts are 'anticipated, checked, inhibited, or modified by the gestures and intentions of his fellows'" (p. 42). Given these objectives, the authors have been remarkably successful—but there are also flaws in this attempt to integrate portions of theoretical frameworks developed to analyze roles, self-conceptions, reference group usages, and the dramaturgical, task, and exchange aspects of social interaction.

THE BOOK's theoretical strategy rests on the assumption that role-identities are the major elements of self-conceptions. A role-identity is defined as the character and role that an individual might devise for himself in relation to some social position such as racial or ethnic, sexual, family, occupational, informal social, philosophical or "deviant" role, etc. These role-identities are idealized, in the conventional sense of being made up of culturally taught ideal expectations for the incumbent of such a position and in the idiosyncratic sense of imaginative 'more or less fantastic embellishments and exaggerations' of the individual as he likes to think of himself being and acting in these role per-

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Edited by A. I. RABIN, Ph.D.,
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formances. The set of idealized role-identities is seen as providing sources of plans, of criteria for appraising performance, for giving meaning to daily events, and, in fact, for providing one of the major sources of human motivation: "As a creature of ideals, man's main concern is to maintain a tentative hold on these idealized conceptions of himself, to *legitimate* his role-identities" (p. 71).

Since the idealized role conceptions are rather tenuously connected to social reality, the person tends to seek continual *role support* from the others with whom he plays out his role performances. This role support is asserted to be an especially important category of interpersonal reward, on a par theoretically with the *intrinsic* rewards (the direct enjoyments attached to a given activity) and the activity's *extrinsic* rewards (salary, opportunities, generalized facilities, etc.). Long chapters provide extensive discussions of selective perception and role performances in both the dramaturgical perspective and the social exchange framework, all within the context of the individual's attempt to maximize his profits in terms of all three dimensions of reward.

A very strong and welcome contribution of this book is its emphasis on self-conceptions as determinants of action. This argument is carried forward by use of two interconnected dimensions of structure within the set of idealized role-identities. The first, called the *prominence* hierarchy, is essentially the rank order of the role-identities' importance to the individual in terms of their past levels of all three kinds of reward, and the individual's degree of commitment to their future performance. The second dimension, termed the *salience* hierarchy (or sometimes the 'situational self'), combines the prominence of each role-identity with the individual's need for role support in it, the desire for intrinsic and extrinsic rewards it is likely to provide, and the individual's perception of the situation's opportunity and demand structure regarding the available quality and amounts of the three types of reward. McCall and Simmons insightfully use the changing interrelations of the individual's prominence and salience hierarchies to analyze the consequences of

the individual's interactions, the careers of his relationships, and the nature of his agendas and life-plans.

THE flaws of *Identities and Interactions* derive from its eclectic virtues. Relatively minor errors involve a completely backwards interpretation of Mead's "taking the role of the other" (p. 54) and a mistaken version of Homans's law of distributive justice (p. 154). More serious is the restricted view of self-conception solely in terms of idealized role-identities. This is an understandable reaction against previous psychologicistic views of self as composed solely of adjectival attributes. But it tends to lead the theorist away from *negative* aspects of self-conception (even where these may strongly determine types of action to be avoided), and puts inordinate stress on the need for role support from whomever may be present in immediate interaction as against the internalization of evaluative standards, such as of competence or moral worth.

Finally, it should be pointed out that only the WHO and some of the WHAT are extensively dealt with in the present volume. The WHEN and WHERE will require much more analysis of social situations and occasions, and the WHY will need a much more comprehensive framework interrelating individual motivation, patterns of normative culture, and emergent social processes. Yet McCall and Simmons have made valuable contributions to our understanding of both self-conceptions and human conduct. It is to be hoped that their subsequent volumes will supply the promised empirical validation and theoretical extension.

Facts are difficult to accept because they must be grasped; mysteries are quickly taken on, since they require belief only.

—DAGOBERT D. RUNES

What College for Whom?

Alexander W. Astin

Who Goes Where to College? Chicago: Science Research Associates. 1965. Pp. ix + 125. \$2.24 paper; \$4.25, cloth.

Reviewed by T. R. McCONNELL

The author, Alexander Astin, received his PhD from the University of Maryland in 1958, has worked at VA Hospitals, taught at the University of Maryland at Baltimore, at Northwestern University and from 1962-64 was Director of Research for the National Merit Scholarship Corporation. He is the 1965 recipient of the Award of the American Personnel and Guidance Association for research on college characteristics and college effects. Now he directs a large-scale program of research on the higher educational system.

The reviewer, T. R. McConnell, is Professor of Higher Education and staff member of the Center for Research and Development in Higher Education, Berkeley. He received a 1933 PhD from the University of Iowa and has taught at Cornell College and the University of Minnesota. He was the recipient of the third annual award of the American Educational Research Association for research on college students. He is a member of the National Academy of Education and author of A General Program for American Public Higher Education.

THE 1960's have witnessed a growing body of research on differential recruitment to colleges and universities and on the impact of college experience on student development. Recent studies of differential selection have explored variation in so-called non-intellective attributes—interests, attitudes, values, intellectual orientations, and other personality characteristics. Concurrently, research on the impact of college experience has greatly expanded the range of outputs considered: to the conventional criteria of persistence, college grades, or achievement test scores have been

added such outcomes as critical thinking, theoretical orientation, esthetic interests, and autonomy.

The development of methods of describing or measuring college environments (Barton, 1961; Pace, 1963; Clark, 1966; Stern, 1966; *et al.*) has made it possible to evaluate Jacob's contention (1957) that with the exception of certain small, highly selective liberal arts colleges, higher institutions have little influence on students' attitudes, values, and personality characteristics. Among a number of studies of impact are Freedman's recent (1967) belated report of the Vassar study and the volume by Newcomb, Koenig, Flacks, and Warwick (1967) containing the second study of changes in Bennington girls during college, together with a survey of the persistence over 20 years of the attitudes of Bennington graduates who were involved in an earlier investigation (Newcomb, 1943).

Research on the interaction of student characteristics and college environments, including student subcultures, has provoked a growing interest in the effects of student 'mix' and the 'fit' between students and institutions. For example, Stern (1960) has presented data on the congruence of student and college characteristics, and Pace (1965) has raised the question of what colleges may be 'best' for certain kinds of students.

THE Astin monograph is concerned mainly with differential recruitment although it contains (p. 89) the inadequately documented assertion that "Those characteristics of an institution that are generally believed to be educational assets—select student body, highly trained faculty, high faculty-student ratio, superior facilities (such as a large library, etc.)—appear to have little impact on the student outcomes that have been studied so far," but that the changes "... that do appear to be a result of institutional influences tend to be in the direction of the dominant orientation of the institution."

The monograph opens with several questions which it does *not* answer, to wit: "How successful are the various institutions in attracting the kinds of students *who can benefit most from*

their particular educational programs? To what extent do today's students, parents, and high school counselors effect a *desirable matching* of students and colleges? Does the present distribution of student characteristics result in an *efficient utilization* of our resources of talent?" (p. 1. *Italics mine.*)

What the monograph does present is data (1) on certain attributes of 127,212 freshmen who entered 248 colleges and universities in the fall of 1961; (2) differences in student characteristics among certain 'types' of institutions among the 248 colleges; and (3) an estimation of student input characteristics for 1,015 four-year colleges and universities. The volume closes with some general suggestions for applying the findings in counseling able students (the data were drawn from students of very high academic ability) concerning their choice of colleges, in administering institutions of higher education, and in planning educational research.

As a basis for categorizing freshman inputs Astin factor-analyzed 52 characteristics, such as average high school grade of the entering student body, percentages of students who had received certain high school awards or recognitions, fathers' average educational level, percentage of students who were planning to go on to graduate school, as well as probable major fields and future occupations. The latter two responses were scored according to a method devised by Holland (1963) to yield indirect information on students' personality characteristics. The statistically derived factors from the 52 items were called Intellectualism, Estheticism, Status, Leadership, Pragmatism, and Masculinity.

The Environmental Assessment Technique was used to score the institutions on the following environmental orientations: Realistic, Scientific, Social, Conventional, Enterprising, and Artistic. The EAT scores were supplemented by those on 4 factors derived from 33 items of information about the institutions, namely, Size, Masculinity, Affluence I, and Affluence II.

Intercorrelations among input variables and institutional variables led Astin to conclude "... that the characteristics of the entering student bodies

are highly related to certain characteristics of the college" (p. 31). However, there is a basic defect in the procedures by which he reached this conclusion. Yonge (1965) has pointed out that "Rather than providing independent estimates of student and environmental characteristics, Astin's methodology may merely be a way of estimating the extent to which the processes of formal selection, self-selection, or both remain relatively constant from one generation of students to another." In fact, the present monograph provides evidence that both freshman input characteristics and college characteristics have remained relatively stable over reasonable periods of time (pp. 50-53). Confident assertions concerning the congruence of student and college characteristics require independent measurements of the two sets of variables.

IN an interesting presentation of institutional variation, Astin shows median standard scores on six input factors for ten groups of institutions, including technological institutions, private nonsectarian liberal arts colleges, private nonsectarian universities, Catholic and Protestant liberal arts colleges and universities, and teachers colleges.

He gives too little consideration to the overlap both of student characteristics and of environmental characteristics among types of institutions. In some instances the overlap is extensive. Particular institutions may not be all-of-a-piece, either. When questions of student mix and student-college fit are raised, it is insufficient to consider mean characteristics either of given institutions or of specified types. Variations in particular colleges or differences from one institution to another of a given type should also be taken into account.

The monograph ignores much of the work that has been done on differential recruitment and institutional environments. There is only one reference to the research by Pace and Stern, and this is to an early report (1958) by these two authors on the construction of the College Characteristics Index, against which the Environment Assessment Technique was initially validated. Twenty-one of the 34 references are either by

Astin (14) or present or previous members of the highly productive research staff of the National Merit Scholarship Foundation.

Whatever its limitations, the monograph is a significant contribution to the study of higher education.

What's Up?

Irvin Rock

The Nature of Perceptual Adaptation. New York: Basic Books, 1966. Pp. x + 289. \$8.50.

Reviewed by CHARLES S. HARRIS

The author, Irvin Rock, received his PhD from the New School for Social Research and taught there for a while before moving to Yeshiva University where he taught until July, 1967. He is now at the Institute for Cognitive Studies, Rutgers University, Newark, where he is Professor of Psychology. He is best known for his papers on one-trial learning and, with Lloyd Kaufman, on the moon illusion.

The reviewer, Charles S. Harris, is a member of the Technical Staff, Bell Telephone Laboratories, Murray Hill, N. J. His PhD is from Harvard University and he taught at the University of Pennsylvania for two years before joining the Bell Labs. The author and reviewer reported jointly in a recent Scientific American paper some experiments that had been carried out separately but any doubts that this collaboration casts on the reviewer's objectivity should be allayed by the paper's conclusion: "... the experimental data are still fragmentary enough to allow us to disagree ..." followed by a one-paragraph summary of each person's conclusions. They both attribute their interest in perception to Hans Wallach, a versatile teacher, who they say inspired both Harris's nativism and Rock's empiricism.

visual space perception—a theory that is then used to explain how people adjust perceptually to optically imposed tilting, inversion, curvature, minification, and other distortions of the retinal image.

The innate visual mechanism, Rock says, can give us only perceptions of relations within the visual field—this line looks tilted relative to that, this area looks bigger than that. Any seemingly absolute perception—the line looks straight and vertical, the circle looks so big—must actually reflect the seen relation between the object and visual information about the observer's own body.

How, then, can we see the absolute size, curvature, or orientation of an object when our bodies are *not* visible? And why, when we look through goggles that invert the entire image, does the world look upside down even if our bodies are visible through goggles? If the answers seem obvious, try specifying them. You're likely to see them demolished in Chapter 2.

In response to these puzzles, Rock develops a memory-trace theory of perception, with an acknowledged similarity to Helmholtz's (appropriately enough, since it was Helmholtz who first reported adaptation to prisms a century ago).

One component of Rock's two-part memory traces is a faithful copy of some feature of the retinal image. The other is visual information that reflects accurately the relevant property of the object that produced the image. The crucial visual information can come from sight of the body or of visual changes produced by the observer's movements, active or passive. But the information must be visual, Rock insists; tactual, kinesthetic, motor, or cognitive information alone can't do the job. Once the traces are laid down, they supply perceptions when the body is stationary and out of sight, and they yield distorted perceptions when distorting lenses are first put on.

can store new traces, connecting correct perceptions with the abnormal images. Eventually, when the new traces supersede the old, he should see things as they really are.

If you read Rock's summaries on pp. 268-269 and 250-252 and then go through the book in the normal order (which is a good way to proceed), you will realize that any brief synopsis is a caricature. Rock's theory gains meaning only from the problems it tries to handle, the arguments that support its premises, and the alternatives that are rejected. In addition, Rock keeps raising issues that others have overlooked: the irrelevance of gravity to upright vision, the meaning of perceived straightness, the real nature of Ivo Kohler's "situational aftereffects," the paradox involved in movement-adaptation.

The theory is potentially able to accommodate an unusually wide range of phenomena. Nevertheless, I remain unconvinced. Some of Rock's key assumptions are debatable. He draws a rather arbitrary line between visual adaptation and nonvisual proprioceptive alterations, which he says may occur when there isn't enough visual information for real adaptation. Indeed, there are doubts that genuine changes in visual perception (the kind of changes the theory is meant to explain) ever do occur; sometimes even Rock shares these doubts, as in the case of inverted or reversed vision.

But then, Rock wouldn't expect that anyone with preconceptions as firmly implanted as mine would be won over. The impressive thing is that his book did force those preconceptions out into the open, where they had to be given some thought. The less opinionated reader will find a useful framework for an otherwise bewildering jumble of data.

Rock's book is not for the casual reader who would like to be told what's new in perception. For the serious student of perception, though, or for anyone who enjoys mental calisthenics, it is worth struggling with—as much for the questions it raises as for the answers it offers.

DON'T be misled by the title of Irvin Rock's book. What the book actually presents is a general theory of

FINALLY we get to adaptation: Optical distortions don't affect the visible relations between objects and the body, so a person who wears distorting lenses

No Mean Feat

Julius Laffal

Pathological and Normal Language. New York: Atherton, 1965. Pp. xxi + 249. \$8.50.

Reviewed by DONALD J. FOSS

The author, Julius Laffal, received a PhD in clinical psychology from the University of Iowa in 1951. He then went to Connecticut as a postdoctoral trainee in clinical psychology in the VA. Up until January 1968, he was Director of Research in the Psychology Service at the Veterans Administration Hospital in West Haven and Associate Clinical Professor of Psychiatry (psychology) at Yale. As of January 15, 1968, he became Director of Research and Psychological Services at the Connecticut Valley Hospital, Middletown, and will continue his association with Yale. He has a cognitive-conceptual dictionary of language in preparation.

The reviewer, Donald J. Foss, received his PhD from the University of Minnesota under James J. Jenkins in 1966 and spent the year 1966-67 at the Center for Cognitive Studies, Harvard. He is now Assistant Professor of Psychology at the University of Texas. His current interests are in psycholinguistics and cognition and he has worked in the area of associative mediation theory. His current research is primarily concerned with the nature of the decisions that are made during language comprehension.

OF late the attention of psychologists who study language has been largely devoted to problems of psycholinguistics, in particular to processes involved in sentence comprehension. This is largely due to the influence of generative grammar and is not by any means inappropriate.

It is refreshing, however, to find a volume that sets its sights higher, on a psychology of language adequate for many facets of normal and pathological language. And it excites interest when the analysis attempts to be a general one, drawing its materials from structural linguistics, association principles, semantic theories, psychoanalytic theory, and case study material.

The central concern in this volume is with the psychological nature of meaning. In Laffal's view language has both a rational role, as in the expression of ideas, communication, and acculturation; and a magical and distorting role as in schizophrenic speech. An adequate discussion of these roles depends upon an appropriate analysis of meaning and its relation to experience. Many pathologies will be clinically more tractable when an adequate theory of meaning is utilized in examining the language associated with them.

The theory of meaning that is proposed draws most heavily upon the associative tradition and is primarily concerned with the meanings of words in isolation. The meaning of a word is defined (p. 41) as the hierarchy of responses brought into play when a person is stimulated by that word. Such a hierarchy is said to have internal categorical structure which may be reflected in factor analyses and which is of great importance since these categories constitute part of the cognitive structure that language imposes upon the world.

Associative theories of meaning are not new and they have a history of

sound and deserved criticism. There are few senses of meaning that can reasonably be equated with a word association hierarchy. The hierarchy is irrelevant for the problem of reference, of course. *Table* does not refer to chair. Further a theory of meaning should be of some aid in defining synonymy and analyticity. That is, since the sentence, "My brother is a male" is in some sense true by virtue of the meanings of the words in the sentence, a theory of meaning of words ought to tell us why. The word association hierarchy has not been shown to be of help in this problem.

Many other problems resist clear analysis within the associative framework. To pick one example from the book, Laffal has difficulty deciding upon the interpretation of idiosyncratic associates to a word. At one point (p. 10) such associates are said to reflect an inappropriate, i.e., non-consensual, referent for the word and thus to be a possible indicant of pathology. At other points (p. 18, 79) such words are said to occasionally reflect universal needs that have been submerged.

THE need for abstract entities in the analysis of meaning is usually overlooked in associative theories. As stated above, the present book does not follow in this tradition. Laffal holds that categories of associative responses are important, that words with the same associative structure in terms of categories have the same associative meaning. Such categories are abstract features of word meaning. However, the statement that such features are limited to categories of word association responses spawns two objections. First, such features should be utilized in defining the meaning of words. But as we have seen above, in the present theory they are not. Second, the limitation of abstract entities to such categories does not permit the marking of certain natural classes of words, for example, those verbs that can only take animate subjects (e.g., eat, smile). Thus the stated theory does not take full advantage of the distinctions it can make, and further the distinctions it can make are not adequate for an interesting theory.

For reasons such as these, the analysis of meaning presented in this book is not adequate. In addition, in some places we are led to infer that associative category analysis plays an important role in sentence construction. Without denying associations a role, studies in psycholinguistics have shown the relative unimportance of associative variables in sentence construction. Psycholinguistics is at least relevant to the psychology of language.

THE analysis of schizophrenic language presented by Laffal is interesting. He looks at words surrounding certain key words that occur in discourse and analyzes these context words for category membership. Since the categories can be constructed with diagnosis in mind, such analyses may give a clue to underlying motivations.

Objective word association studies have not been very successful in diagnosis. The present technique may prove fruitful although the evidence presented in the book is not strong. The inferential step from categories to underlying motives or difficulties is not well defined. When a category theme leads to a diagnosis which is contradicted by case history data, Laffal suggests that wish fulfillment is at work. Of course, such difficulties of interpretation are not limited to the present work.

The analysis of schizophrenic language does not, in my opinion, rest on the presented analysis of normal language. Since the associatively based theory of meaning (even with categories) is not an adequate representation of normal language capabilities or processes, we would not expect to find pathologies well explained by assumptions of breakdown of this theory.

Laffal set himself a very difficult task. Although his discussions of language pathologies are quite interesting, I do not find the result to be a workable synthesis of the fields that concern him. It is open to serious question whether such a synthesis is possible when primarily based upon associative theory.

Tribute to a Fallen Leader

Warren G. Bennis, Edgar H. Schein, and Caroline McGregor (Eds.)

Leadership and Motivation: Essays of Douglas McGregor. Cambridge, Mass.: The M.I.T. Press: 1966. Pp. xxiii + 286. \$6.95.

Reviewed by WILLIAM FOOTE WHYTE

The author of this book of articles was, at the time of his death, Sloan Fellows Professor of Industrial Relations at M.I.T. A former president of Antioch College, he was a pioneer in behavioral science research in industry. The editors of the volume, Warren G. Bennis and Edgar H. Schein, were colleagues of McGregor at M.I.T. Caroline McGregor is his wife.

The reviewer, William Foote Whyte, is Professor of Industrial and Labor Relations at New York State School of Industrial and Labor Relations, Cornell University. His best known book is Street Corner Society. He is also author of Money and Motivation and Men at Work. He did his first study in industry in 1942 and has known McGregor since 1938. He is at present on a Career Research Award from NIMH.

THE MANY FRIENDS and admirers of Douglas McGregor (1906-64) will welcome the addition of this book of essays to the literature on human behavior in organizations. Those who are just beginning to get acquainted with this field are bound to find the book much less satisfying.

The problem that the editors of this volume could hardly resolve is that Doug McGregor was much more important for what he was than for what he wrote. A founder of the Industrial Relations Section at M.I.T. in 1937, he was a pioneer in bringing the behavioral sciences into industrial relations research. While industrial psychologists were already well established in their sector of the field, it was McGregor more than any other who opened the

door for social psychological research in industry.

McGregor was no narrow disciplinarian. He was a leading figure in the great intellectual ferment of the 1940s through which psychologists, anthropologists, and sociologists created the new field of Organizational Behavior (or Industrial Social Psychology or Industrial Sociology). With anthropologist Conrad M. Arensberg, he produced one of the early landmarks of the new field: "Determination of Morale in an Industrial Company" (*Applied Anthropology*, 1942, vol. 1, no. 2, not included in this collection).

It is probably no exaggeration to speak as does Mason Haire, a former student: "A large segment of his professional field operated in an environment which he created. Much of the work that goes on now couldn't have happened if he had never been." At least, what has happened was enormously speeded up and stimulated by Doug McGregor.

But it was not McGregor's research output which had this effect. He did little data gathering in the conventional sense. Combining illustrative cases from his own experience with reported research findings, he became the leading interpreter of the behavioral science approach in organizational studies, both to his professional colleagues and to industrial management.

His sole previous book, *The Human Side of Enterprise*, is an able exposition of what is sometimes called "participation management"—undoubtedly the most popular approach in the management literature today. One can hardly be literate in management discussions today if he is not familiar with the contest described by McGregor between Theory X (a mechanistic view growing out of "scientific management") and Theory Y (the more organic view growing out of behavioral science research).

DOES the present book add anything to *The Human Side of Enterprise*? Very little. That book represents a distillation of what McGregor had thought and written over the years. The present book simply presents some of the materials from which the distillation was made—

with the exception of three chapters from later writings.

One chapter, "An Analysis of Leadership," is taken directly from *The Human Side of Enterprise*. Other chapters on managerial leadership, the Scanlon Plan, performance appraisal, and staff line relations have a very familiar ring to them. "The Staff Function in Human Relations," originally published in 1948, now looks disappointingly dated. The earlier book presents a much better treatment of this problem area.

Throughout most of his career, McGregor concentrated his attention upon authority relationships and gave no systematic attention to the technological context in which industry exists. It is only in the last chapter of the present volume that he seeks to come to grips with the "socio-technical systems" in the studies of English social scientists Eric Trist and A. K. Rice.

The later research of Joan Woodward and Tom Burns in England and Leonard Sayles in this country is beginning to demonstrate the dependence of organization structure upon technology and work flow. These writings suggest that the action implications to be drawn from the Theory X versus Theory Y framework must now be reformulated.

But if Douglas McGregor had lived, he would have incorporated these new trends into his interpretations of organizational behavior. For that is the kind of man he was.

Tender-Minded Psychotherapy

Jan Ehrenwald

*Psychotherapy: Myth and Method,
An Integrative Approach.* New
York: Grune & Stratton, 1966. Pp.
x + 212. \$7.75.

Reviewed by NORMAN S. GREENFIELD

The author, Jan Ehrenwald, is identified by the reviewer, Norman S. Green-

field, Professor of Psychiatry and Associate Director, Wisconsin Psychiatric Institute, University of Wisconsin Medical Center. Greenfield received a 1953 PhD in psychology from Berkeley. He practices and teaches dynamically oriented psychotherapy to psychology fellows and psychiatric residents. For a change of pace he is involved in psychophysiological research.

IN a recent review of contemporary developments in the field of psychotherapy Dr. Kenneth Colby began by indicating that "chaos prevails." Undoubtedly this is still so. The icons which we bowed to in the past have lost their awesome sway; many of the guidelines have been blurred, and perhaps most significantly, there is a growing body of belief that psychoanalysis, the king, is dead—or, at least, moribund.

Perhaps as a reaction to the long dominant position of psychoanalysis as the primary driving force of American psychotherapy and the apparent inability of psychoanalysis to enter the mainstream of academic and scientific discipline and responsibility, we are in the midst of what might be thought of as an ideological backlash, or, more properly, backlashes.

These revolts (and that label seems to fit) range from the most tender-minded existential-phenomenological positions with their attempts at re-humanization of the patient and the psychotherapeutic situation to the tough-minded behavioristic orientation of the behavior modifiers who choose the course of ignoring (or de-emphasizing) the world of inner experience and the vicissitudes of complex motivations.

In reviewing the present volume, *Psychotherapy: Myth and Method*, it is necessary to recognize the tough-minded-tender-minded dichotomy because its existence is critical in contemporary psychotherapy and it would be impossible to render a fair review without specifically recognizing it. Of course, it is true with all books, but in the present case it is even more true that the value of this book will be a function of the values of the beholder.

There is little doubt that the tough-minded critic will lament the fact that at a time when an increasingly articulate

group is becoming more and more critical of the Emperor's attire, here is a book in which His Majesty emerges more resplendent than ever. The tender-minded reader will welcome a renewed opportunity to view man and his problems in the context of the uniqueness of human experience.

THE AUTHOR, Dr. Jan Ehrenwald, a psychiatrist who received his medical training in Czechoslovakia and who took post-graduate work in psychiatry in Vienna in the twenties, is a man of long experience and broad talent. His orientation is primarily psychoanalytic but he apparently is not a dues-paying member of organized psychoanalysis, and, for him, orientation does not mean uncritical allegiance. The richness of his thinking reflects an existential point of view which ante-dated the current existential bandwagon. Dr. Ehrenwald is one of the pioneer thinkers and contributors to the field of parapsychology. He published *Telepathy and Medical Psychology* in 1948. His point of view appears to have been very much influenced by his acceptance of parapsychological phenomena as real events which very likely influence the process of psychotherapy.

In an attempt to explicate some of the common denominators of all psychotherapy and to penetrate the maze of psychotherapeutic brands and models, the diverse conceptual frameworks and the claims and counter-claims, Dr. Ehrenwald sets as his goal the task of defining those interpersonal elements which contribute to effective psychotherapy. Toward this task his volume is divided into 3 parts: Part I is devoted to the modes of primitive healing—the power of myth and of magic, the historical and prehistorical precursors of what some of us presumably do today. Part II reviews some of the contemporary psychotherapy systems with their almost reactive denial of any magical position. Freud, Jung and the Existentialists are examined as are some aspects of the newer Behavior Therapies and some lesser known modalities. These sections reflect a remarkable depth of scholarship and range of information, both psychiatric and non-psychiatric.

Part III is largely an attempt at integrating some of the diverse conceptual systems via the thesis that the reaction of contemporary psychotherapy against its magical antecedents and the emergence of the scientific orientation in psychotherapy as epitomized by psychoanalysis (sic) has resulted in too much of the baby being thrown out with the bathwater. The author's plea is that we not disregard those phenomena which have been hitherto rejected and relegated to the magical but that we face them squarely in the attempt to understand and harness them for therapeutic gain. Much of what has been labeled magic and myth as well as parapsychological events would belong to this class of data. The author points out that "... effective ideologies are in fact the latter-day derivatives, or neotypes, of ancient mythical concepts."

To serve and expand his thesis Dr. Ehrenwald introduces some new concepts which purport to throw further light on the psychotherapeutic process. "Doctrinal compliance" denotes the patient's productions which tend to comply with the therapist's unconscious or pre-conscious expectations; the "existential shift" is the reorganization of the therapist's inner experience which is reflected in a corresponding shift in the inner experience of the patient. And so on. One can question the value of these and other constructs which are set forth. To this reviewer, who has spent a score of years listening to patients, they ring familiar bells and elicit recognizable images. But they lack real heuristic significance and one has to question the continuing value of metaphorical translations no matter how elegant they may be.

This is a learned book by a learned man and the reader will become intellectually richer though not much wiser.



Nobody can grasp the nature of things from an armchair, and until fresh experiments have been performed we do not know what their results will be.

—D. E. BROADBENT



No Help in Treatment

Barry A. Kinsey

The Female Alcoholic: A Social Psychological Study. Springfield, Ill.: Thomas, 1966. Pp. viii + 223. \$8.75.

Reviewed by

ALFRED and DOROTHY BOCHNER

The author, Barry A. Kinsey, is Associate Professor of Sociology at Oklahoma State University. He received his PhD from the University of Nebraska in 1962. He has taught at Nebraska, North Dakota and Gustavus Adolphus College. His areas of interest are in deviance, alcohol addiction and collective behavior, especially community reactions to crisis.

The reviewers, Alfred and Dorothy Bochner, are husband and wife. Alfred Bochner received his MD from the University of Toronto in 1938 and has been a United States resident since 1947. He is at present Psychiatrist-in-Chief, Department of Medicine, Cleveland Metropolitan General Hospital; Assistant Professor of Psychiatry, School of Medicine, Western Reserve University; and Vice-President, Psychiatric Educational Foundation, Cleveland. He has spent a while as a Visiting Research Fellow at Stanford's Institute for the Study of Human Problems. He has been concerned with the treatment of alcoholics since he first ran into the problem while a senior medical officer of a Royal Canadian Air Force convalescent hospital in 1943; since then he has directed a treatment program at the Cleveland Center on Alcoholism. Dorothy Bochner studied psychology and art at George Washington University. She is an ingenious collaborator both in reading and writing in his fields of interest.

THIS is an interesting book. The author explores the characteristics of alcoholic women, and the psychosocial conditions associated with alcoholism. His frame of reference is, by his own design, a limited one. His subjects are all from a state hospital sample: 46 female inebriates admitted over a three-

month period to a Minnesota State Hospital. Data were obtained through interviews in questionnaire form. To the author's own regret, there were no control groups.

What has emerged is a valuable summary of the literature on the subject and a provocative discussion of the author's clinical findings in relation to his social behavioral hypotheses. He concludes with a list of questions which reflect the difficult problem of distinguishing between what is cause and what is effect of alcoholism. There is an unwarranted tacit assumption that earlier work on alcoholism was not sufficiently oriented to sociological and cultural considerations, and he boldly throws critical research responsibility to the behavioral scientist.

The data lend themselves to the impression that the subjects have recalled their life histories in a way that supports a part of the author's hypotheses, specifically, that alcoholics have special needs that are fulfilled by alcohol. This the alcoholic has good reason to believe. But, the selection for attention of any one cause or group of causes in terms of needs satisfied by alcohol requires comparative studies of the consequences of such unfulfilled needs in a large control group. The organic as well as the psychodynamic effect of several different measures that might fulfill their needs are no longer of interest for the alcoholic. Where there are several possible fulfillments of a need and alcohol provides one of them, there is no choice but alcohol for the alcoholic. This is "learned."

The author warns, on page 67: "the researcher . . . is faced with the problem of identifying which is cause and which is consequence." Then he suspends the discussion at a point that scarcely justifies the publication of the text in its present state, unless it be as an introductory volume.

THIS small book set in motion for the present reviewers a disappointing experience. We took the book up with the hope, engendered by its title and introduction, of getting to understand better the many alcoholic women we have tried to help in our roles of psychoanalyst,

general hospital psychotherapist, and supportive counselor. We were left unenlightened with respect to the many alcoholic women we know who have had loving parents, kind and reliable husbands, and a stable rather than contracting and shifting set of social circumstances. In fact we were left with the impression that with a wider base in case selection, the author would have had to admit the irrelevance of his questions to alcoholic women patients and to divert himself to a psycho-pharmacologic line of study: direct observation of alcoholic women before, during, and after alcohol ingestion in the prevailing circumstances of their lives. He would then have had to meld a different hypothesis with his present sociopsychological one of alcohol as a group-defined mode of coping with emotional stresses. The different hypothesis is that alcohol intoxication causes a remarkable pleasure-ridden set of sensations for certain people, who will even court disaster to recapture these alcohol-related sensations. Concurrently, they lose their interest in the pursuit of other sources of satisfaction, be they nutritional, sedative, intrapsychic or psychosocial. In relation to this line of thought it is noticed that the author gave special emphasis to his respondents' adjustment to adult sex roles, but then made no place in his scheme for the many women whose alcoholism had developed and progressed while in a loving relationship with a good husband. In his discussion of alcoholism as a disease or symptom he does make clear the common need of diagnosticians and therapists: a setting in which the alcoholic willingly or unwillingly lives without alcohol, and with some affiliation in terms of non-drinking social relationships. But then, in his discussion of implications of his findings for therapy, he concludes that the most effective approach to the problem would be to exercise greater control over earlier attitudes and drinking experiences. How this concept can be used to prevent alcoholism in women is not delineated in a plausible fashion. The lines of reasoning in this hypothesis would lead to a conclusion that the developing female human needs to be given strong confidence in her sexual role, great opportunity to enjoy it in a

socially approved manner, and an awareness that if alcohol can substitute for deprivation in this human relationship then alcohol had best be avoided, lest it create a dangerous pit-fall. This is scant reward for a reader who has been led on by a promise on the publisher's dust-jacket that "here for the first time is a study of female alcoholism that makes full use of the concepts and methodological tools of the behavioral sciences." It is hard to find where the author has added anything to what is possible in the real world of practice.

Shaky Foundations

Richard H. Dana

Foundations of Clinical Psychology: Problems of Personality and Adjustment. Princeton: Van Nostrand, 1966. Pp. viii + 322. \$6.75.

Reviewed by LEONARD OSEAS

The author, Richard H. Dana, received a PhD in psychology in 1953 from the University of Illinois and has taught at the Universities of Wisconsin (Milwaukee) and Nevada, West Virginia University, and the University of South Florida. He has his ABEPP diploma and has written numerous periodical publications and papers. At present he is Professor of Psychology at the University of Wyoming.

The reviewer, Leonard Oseas, is Professor of Psychology and Director of the Psychological Services Center at the University of Cincinnati. He has a Northwestern PhD and has been the Chief Psychologist for a large VA hospital, is currently a VA consultant, and is or has been consultant to a number of social agencies, school systems, industrial firms, and consulting organizations. He teaches graduate level clinical and community psychology courses. Currently his main professional interest

is in applications of clinical skills and knowledge to community and social action programs.

PROFESSOR DANA has produced a curious book whose main virtues are a spare, economical, writing style and an imaginative combining of topics ordinarily dealt with separately in more conventional texts. Unfortunately, these small credits are more than cancelled out by the book's major deficiencies.

Intended as an introductory text in clinical psychology, the book purports to deal selectively and in depth with the central issues of contemporary clinical practice and theory. The dust jacket promises that there will be no distractions by "current fads," and the author obliges by omitting any discussion (in most cases even mention) of such passing irrelevancies as: the nature and measurement of intelligence and mental retardation; the organization and content of psychological reports; conditioning or learning paradigms in psychotherapy; the interests of clinical psychology in preventive mental health, institutionalization and rehabilitation; the actuarial versus clinical prediction issue; and other matters too numerous to list.

It is incumbent upon the author who chooses to ignore such fundamental issues to convince the reader that the foundation that remains can support the whole edifice of clinical psychology. This is far from the case. The topics he selects for consideration are the traditional ones, apparently limited by the author's interests rather than by their compelling centrality. Moreover, the treatment they receive is at once superficial and unclear.

INSTEAD of the promised in-depth discussions, the reader is offered cursory, over-simplified discourses on the statistical concept of normality, the differences between psychoanalysts, psychiatrists and psychologists, three kinds of personality theory (psychoanalytic, trait, and type), projective tests, and so forth. One of the book's four main parts whose title (*The Normal Person*) suggests the laudatory intention to integrate concepts from the areas of normal development and psychopathology, offers

Balance for the Unbalanced

Charles R. Shaw, MD

The Psychiatric Disorders of Childhood. New York: Appleton-Century-Crofts, 1966. Pp. ix + 422.

Reviewed by ANN MAGARET GARNER

The author, Charles R. Shaw, trained in Michigan with Ralph Rabinovitch and Sara Dubo, among others, and is Staff Psychiatrist and Director of Research, Hawthorn Center, Northville, Michigan. He has written articles on genetically determined enzymes in human red blood cells, on metabolic studies in childhood schizophrenia, on humor in child psychiatry, on suicidal behavior, on reading disability, and on tranquilizers.

The reviewer, Ann M. Garner, is Professor of Psychology, University of Nebraska. Her PhD is from Stanford and she taught there for several years before going to the University of Wisconsin where, from 1945-1952, she directed the clinical program. She spent '52-'53 as a USPHS post-doctoral fellow at the Illinois Psychiatric Institute and then taught at Illinois College of Medicine. She is recently and currently involved in studies of psychosomatic disorders in children and of chronic illness in children. She is also involved in teaching and writing in personality theory (influenced by her post-doctoral training at the Chicago Institute for Psychoanalysis).

THE integration of scientific with clinical approaches to the study of human behavior is a persistent focus of controversy. This book, written by a physician experienced in both approaches, seeks a fusion of the two in the field of child psychiatry. If the product represents rather an alternation than a fusion, it is none the less impressive. Few books on child psychiatry present both critical research reviews and informed clinical techniques in so delicate a balance.

The alternation of research and prac-

tice is clear from the organization of the contents. The opening chapters review research on the origins of behavior, succeeded by highly practical sections on referral sources and diagnostic process. There follow chapters on specific disorders (childhood schizophrenia, psychoneurosis, learning disabilities, brain damage, personality disorder, psychopathy, mental retardation, juvenile delinquency) and on specific therapies (psychotherapy, residential treatment, psychopharmacologic therapy).

In these sections, the intermingling of formal research results with clinical insights is continually apparent. Diagnostic classifications are examined in terms of reliability, for example; learning disabilities are viewed in a context of studies of language development and perceptual process; divergent therapies are discussed in the light of available research results. The style is at once lively and precise, informative and wryly humorous, as befits an author whose own research has ranged from metabolic disorder in schizophrenia to the use of humor in child psychiatry.

BUT no book can be in complete balance, nor would such an achievement be necessarily useful. There is here a commitment to biological principles, particularly those of evolution and natural selection, and to a medical model of psychiatric disorder, which tips the scales. Thus the basis for diagnostic classification is *etiology*, which turns out to be an heredity-environment, biological-experiential sort of proposition. Although environmental factors are always considered, it is typically the hereditary, biological factors which receive heavy weight. Or, as another example, psychoanalytic principles are espoused where they seem useful, but there is no particular commitment to Freudian theory. If the scales threaten to tip here, it is because of light weight given to the potential contribution of psychoanalysis to the future of child psychiatry—surely an imponderable in any case.

There is much in this book of value to the clinical psychologist. The account of residential treatment (based on

instead a hurried overview of findings from animal research (imprinting, wire monkey mothers, etc.) in one brief chapter, followed by three chapters on specific tests and measurement techniques. The deficiencies of the book's last part, entitled "Toward a Science of Clinical Psychology," epitomize the shortcomings of the book as a whole. It is composed in its entirety of one 16-page chapter which in no way addresses itself to its proclaimed lofty purpose. It contains instead a plea for "humaneness and identity," a criticism of contemporary practice in the training of clinical psychologists, reassurances that man can change if he will but use his intelligence and creativity, and similar pieties.

Granted that the book's arbitrary selectivity limits its usefulness as a general clinical text, might it not serve as an adjunct to some more comprehensive text? This reviewer's answer is a firm negative. The author's disturbing penchant for making questionable, misleading, and at times outrightly erroneous assertions would disqualify his book for even this purpose. A few direct quotations should tell the unhappy story:

"What is personality? It is believed that there is one right or true answer and we can know it" (p. 17). "Whenever a forced choice is demanded of the subject, response sets occur" (p. 148). "The ability to feel . . . is mediated by anxiety" (p. 205). I suspect that O. H. Mowrer will be less than happy with the author's designation of him as a neo-Freudian (p. 203); Paul Meehl is likely to remain unconvinced by Dana's assertion that his (Meehl's) distinction between actuarial and clinical approaches is nothing more than a specific instance of the "nomothesis versus idiography dichotomy" (p. 138).

Most of the neophyte clinical students of the reviewer's acquaintance have enough misconceptions of their own. They don't need Professor Dana's as well.



the Hawthorn Center), of psychotherapeutic process, of interdisciplinary functioning in research and practice, of emotional effects of physical illness, will be useful. Psychologists will find some of the material puzzling (the use of terms from learning and perceptual theory, for example); they will temper many of the rather enthusiastic statements regarding psychometric methods. And there will always be differences of opinion as to which research investigations merit inclusion. For so eclectic a book, there is a surprisingly brief account of behavior modification therapy, by contrast, say, to the entire chapter on drug therapies, the latter complete with technical names, dosages, and side effects. One might also have expected a wider variety of citations on physical illness, and more references to studies of children rather than adults with psychosomatic disorder.

This book exhibits the developing subspecialty of child psychiatry as a coherent field of professional endeavor, in which objectivity and compassion, research and practice, seek balance. It confirms its author's philosophy that "... it must not be forgotten that no single discipline has a corner on the investigation and understanding of human behavior" (p. 417).

Where the Action Is

Warren G. Bennis

Changing Organizations: Essays on the Development and Evolution of Human Organization. (McGraw-Hill Series in Management) New York: McGraw-Hill, 1966. Pp. xi + 223. \$6.95.

Reviewed by LAWRENCE K. WILLIAMS

Warren G. Bennis received his PhD from M.I.T. After teaching at Boston University, he returned to M.I.T. in 1959 where he eventually became Chair-

man of the Organization Studies Group at the Alfred P. Sloan School of Management. Most recently he has moved to the State University of New York at Buffalo where he has assumed the duties of Provost of the Faculty of Applied Sciences and Administration.

The reviewer, Lawrence K. Williams, is Associate Professor, Department of Organizational Behavior, New York State School of Industrial and Labor Relations, Cornell University. He was previously Study Director at the Survey Research Center of the University of Michigan. His research has reflected a concern for the interaction of personality and organization. Most recently he has been conducting longitudinal research projects in Peruvian communities and factories in collaboration with William Foote Whyte. Williams is currently (1967-68) on a Fulbright Research Scholarship studying in Peru. His PhD is from Michigan.

THIS SHORT BOOK of essays, written for diverse audiences, comprises a report on the adolescent period of a school of thought and action which, while lacking a specific name, can be defined operationally by noting that the most cited authors are Argyris, Blake, Lewin, and McGregor. Bennis's essays capture both the awkwardness and the zeal of the adolescent period of this movement which has grown out of the human relations orientation and which is now a part of an emerging area called "organizational behavior."

Most of the members of this movement are related in one way or another to such organizations as the Institute of Social Research at the University of Michigan, the Tavistock Institute, and the National Training Laboratories. Bennis, as well as most of the other members of this group, has been deeply influenced not only by Lewin's theory, but also by his now famous dictum that "there is nothing as practical as a good theory." One of Bennis's stated objectives is to examine "what behavioral sciences can do about directing the rate, shape and consequence of change" in organizations. The assumption is that this process will involve not only a test, but also the development of behavioral science theory.

From the index, one can determine that the most cited topics are bureaucracy, democracy, change agent, and laboratory training. Part I is Bennis's more unique contribution, is concerned with the first two, while Part II is devoted to the latter two. The human relations movement is often endorsed because it feels good; in societies like ours it is "natural" that participation, democracy, job involvement are good. In Part I Bennis argues that "democracy has been so widely embraced not because of the yearning for human rights but because under certain conditions it is more "efficient" form of social organization. Bureaucracy is described as a "machine" invention that is fast outliving its usefulness and is incapable of adapting to rapid change.

WHILE the problems of the bureaucratic "machine model" are well detailed, the "inevitability," to use the author's own words, of the democratic, participative, organic organization is put forth less convincingly. Although Bennis emphasizes that *under certain conditions* the non-bureaucratic organization is the most efficient, the book is weakest in describing the limiting conditions. It should also be noted that up to now Bennis and others with this approach have worked principally in large, successful, affluent organizations who can perhaps "afford" democracy and where the environment is reasonably consistent with the participative approach. Even though the democratic model may be inevitable in a developmental sense, the time span may be much greater than that implied. Nevertheless, Bennis does provide a thought-provoking description of the organization of the future.

It is one thing to design an organization and quite another to carry that design off. Part II, as noted above, is concerned with the transferring of "valid" social science knowledge to the organization, and much of the discussion is useful to the ever increasing number of people concerned with the application of social sciences to the many problems of today. This is where the action is.

Planned organizational change development is hard work. Bennis and others

have devoted considerable energy to actually changing organizations and describing this process. Most of the latter chapters of the book are devoted to the "change agent." The change agent is more than just a translator; he is a social scientist who has the patience, fortitude, and skill to inject social science knowledge into a client's system. A particularly useful chapter for those interested in the change process involves an attempt by Bennis to place planned change into perspective and to note the problems associated with each of the various modes of introducing change to an organization or system. One process available to the change agent is the Training Laboratory, and Bennis reports rather fully on the use and misuse of the Training Lab including the T-group process. In this book Bennis is concerned with the effect of T-group or group dynamics training on the organization as distinct from its impact on the individual.

Bennis is much less a missionary than many others writing in this field. For this reason "outsiders," especially those concerned with isomorphisms between personality and organizational structure or process, should find this worthwhile reading. They should become convinced that "actionists" like Bennis, attempting to restructure organizations in terms of a positive image of man, have at least one foot, if not both, firmly planted in contemporary and social psychological theory.



Any man who loves his calling loves it for more than its use; he loves it because it seems to have meaning. A scholar who will defy the world in order to write or speak what he knows a scientific truth, the Greek philosopher who chose to die rather than protest against Athens, the feminists to whom woman-suffrage was a 'cause' for which they accepted ridicule as well as punishment, show how entirely realistic performances may point beyond themselves, and acquire the value of superpersonal acts, like rites. They are the forms of devotion that have replaced genuflections, sacrifices, and solemn dances.

—SUSANNE K. LANGER



BRFLY NTD

A. REZA ARASTEH. *Teaching through Research: A Guide for College Teaching in Developing Countries*. Leiden, Netherlands: E. J. Brill, 1966. Pp. viii + 204.

"Among the problems that technically less-developed countries share in common is the problem of manpower and the utilization of university facilities for social change and economic development. This book is designed to facilitate the work of college social science teachers in less-developed countries. It aims at (a) combining social research with teaching so that the scientific habit will be cultivated within the social sciences, and (b) furthering social science techniques in societies where textbooks are lacking and objective research in this field is just beginning."

These words begin Arasteh's book, in which he describes methods of teaching social science through practical experience in the use of social science methods. For example, two chapters describe the use of student-collected case histories in teaching education, one chapter deals with the use of content analysis in teaching a course in the history of education, the use of "the area study method" in teaching geography, and the use of survey methods in teaching the other social sciences.

The important thing about all of these techniques is probably the fact that it takes the student out of the classroom of the usual lecture situation into more active study and thought. Arasteh seems to be sensitive to the problems of introducing educational change and has an interesting chapter on the relationship of these methods to Islamic contributions to educational methods. Moreover, he is very conscious of the need to avoid changes requiring extensive equipment or outside source materials.

While the book is designed for teachers of social science in the less-developed countries, many teachers in our own "more-developed" country could well use such innovations in their own courses. In any case, prospective Fulbright lecturers, particularly in the Middle East, will find this an interesting and useful preparation for their teaching.

WILBERT J. McKEACHIE

WILHELM BITTER (Ed.) *Einsamkeit in medizinisch-psychologischer theologischer und soziologischer Sicht*. (Loneliness in medical-psychological, theological and sociological perspective) Stuttgart: Klett, 1967. Pp. 224. DM/18.80.

The proceedings of the 1966 Freudstadt Conference on Loneliness reflect the multi-faceted approaches to a central problem of our time, man's alienation from himself and others. Loneliness is viewed with anxiety, and is something to be avoided in the age of TV and "togetherness." The sixteen contributors present a variety of views that may be of particular interest to many North Americans who seem more prone to loneliness and less concerned with the positive creative aspects of aloneness than most Europeans.

HENRY P. DAVID

J. SAMUEL BOIS. *The Art of Awareness: A Textbook on General Semantics*. Dubuque, Iowa: Wm. C. Brown, 1966. Pp. xix + 299. \$6.75.

A textbook of general semantics. Bois was personally associated with the founder of this movement, Alfred Korzybski, under whose supervision he taught during the 1940's. This book combines a historical treatment of the subject, with

special reference to Korzybski's contributions, and a practical, plainly written presentation for the student. It is liberally supplied with references to psychologists and their contributions.

MELVIN MARX

POL DEBATY. *La mesure des attitudes.* (La Psychologue, Paul Fraisse, Ed.) Paris: Presses Universitaires de France, 1967. Pp. 202.

DeBaty's aim is to provide a summary introduction to the measurement of attitudes. He begins with a section on measurement problems and then proceeds to a survey of scaling techniques and issues. It is hard to imagine, however, the potential American audience for his book. The brief discussions of polyvalence, item ambiguity, scalogram analysis, and latent structure presuppose too much background on the part of the undergraduate and are too sketchy for the student who is more advanced. The concluding six page *synthèse* merely emphasizes the very abbreviated treatment of attitude measurement presented in this volume.

DAVID ELKIND

MAURICE DE MONTMOLLIN. *L'Enseignement Programmé.* Paris: Presses Universitaires de France, 1965. Pp. 127.

This is a brief, readable introduction to the field of programmed learning. It defines the basic concepts in simple terms, describes programming techniques and teaching machines in clear and straightforward language and illustrates the applications of programming technology with examples from a variety of settings and from many different countries. My impression is that it stands up favorably with comparable books in English.

DAVID ELKIND

FREEMAN F. ELZEY. *A First Reader in Statistics.* Belmont, Calif.: Wadsworth, 1967. Pp. 71. \$1.25.

Over one-half of this paperback is devoted to the use of erroneously defined confidence intervals. (See this journal, 1966, 11, 593, for review of another

Elzey-Wadsworth product.) Can't Wadsworth afford a consulting editor?

QUINN MCNEMAR

J. J. FELDMAN. *The Dissemination of Health Information: A Case Study in Adult Learning.* (A NORC Monograph in Social Research) Chicago: Aldine, 1967. Pp. xii + 274. \$6.95.

Based on a national survey conducted in 1955 by the National Opinion Research Center, this 224-page hard-cover monograph contains a wealth of data on the attitudes of the American public towards medical care and information concerning medical care. The book will be of interest primarily to psychologists in the area of public opinion. One chapter describes the methodological problems encountered in the research.

MELVIN MARX

JEAN GUILLAUMIN. *La Dynamique de L'Examen Psychologique: L'Analyse de L'Interaction dans une Situation de Face à Face.* Paris: Presses Universitaires de France, 1967. Pp. 438.

The aim of this book is to view three major problems of psychological testing: subjectivity, objectivity, and the choice of a descriptive language from sociological as well as psychological perspectives. To this end, Guillaumin reviews and critically evaluates the concepts and theories of a multitude of diverse authors. Unfortunately, the impressive scholarship of the book is its major handicap since most of the positions and viewpoints are merely outlined and rarely dealt with in detail. This summary treatment is confounded by the author's failure to integrate the diverse viewpoints in any effective way. Accordingly, while this book raises many interesting clinical issues, it does not bring us any closer to their resolution.

DAVID ELKIND

JOHN F. HALL (Ed.) *Readings in the Psychology of Learning.* Philadelphia: Lippincott, 1967. Pp. xi + 525. \$4.25.

This selection of experiments on animal and human learning will provide

many instructors with enough good material to keep their students engaged. Save for a few exceptions, the chosen papers are up-to-date and represent significant facets of the contemporary psychology of learning.

JUDSON BROWN

HEINZ STEFAN HERZKA. *Die Sprache des Säuglings: Aufnahmen einer Entwicklung.* Basél/Stuttgart: Verlag Schwabe, 1967. Pp. 71. S. Fr. 1.

A chronological account of the types of sounds made by an infant during its first year. Emphasis is given to accompanying behavior, meanings, and their social consequences. The major sound categories are recorded on a disk attached as an appendix. The book with its 129 references should prove very useful for all those interested in infant development and linguistics.

FRANK WISLEY

MALCOLM W. KLEIN (Ed.) in collaboration with BARBARA G. MYERHOFF. *Juvenile Gangs in Context: Theory, Research, and Action.* Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. xi + 210. \$3.50.

This volume consists of fifteen papers presented at a conference on gang delinquency in 1963. The papers are grouped into four content areas. The first contains papers (G. D. Robin, W. B. Miller, I. Spergel) describing patterns of delinquent behavior exhibited by gang members. The second contains reports dealing with relationships between gang behavior and the values and perceptions therewith associated. The third includes papers on community context and community response to delinquent behavior. The final section consists of four papers describing specific action programs, (e.g., M. Bib on "Gang-Related Services of Mobilization of Youth"). Over-all, this book can be viewed as a progress report on the "state of the art" for a particular area of delinquent behavior.

GLORIA F. LEIDERMAN



ALFRED LANG (Ed.) *Rorschach Bibliography 1921-1964*. (Titles in French, German and English) Bern/Stuttgart: Verlag Hans Huber, 1966. Pp. 191. Fr./MD 36.—.

Alfred Lang will be blessed by Rorschach researchers for compiling a carefully classified bibliography of 3,855 titles, spanning 24 years and including a useful author index. The editor's postscript, citing Laurence F. Shaffer of 1961, provides all the comment needed, "The Rorschach is neither as dead as its opponents aver, nor as eternal as its faithful adherents believe. It is a prelude to research on personality and has hardly begun."

HENRY P. DAVID

TRAFFORD P. MAHER. *Self—A Measureless Sea: Counseling: Theory and Practice*. St. Louis, Missouri: Catholic Hospital Association, 1966. Pp. xi + 196.

The author has written a book with many divergent qualities. It is defined as a resource book for personnel in the field of guidance and counseling. Addressing itself primarily to school guidance and counseling personnel, the content is said to be applicable to every agency and institution responsible for the psychological, emotional, mental, and spiritual formation of youth and young adults (p. 1). In content it ranges throughout ten compact chapters from an historical overview of counseling, to theoretical considerations, counselor preparation, the role of values in counseling, psychological needs, self-concept formation, life roles, personality structure, a counselor interview, and group guidance. There are a number of useful ideas in this little book, but in attempting to be original the author is often confusing. The writing is at times laborious and repetitious. There are a number of errors and omissions in the bibliographical listings. The author's dualistic approach to human personality is clearly out of touch with contemporary thinking.

ALEXANDER A. SCHNEIDERS

WILLIAM M. MEREDITH. *Basic Mathematical and Statistical Tables for Psychology and Education*. New York: McGraw-Hill, 1967. Pp. 333. \$3.95.

Sixty-three standard mathematical and statistical tables reproduced from many sources. Not unique to psychology or education but a useful compilation to have on the office or lab shelf.

QUINN MCNEMAR

DAVID L. PERRY. *The Concept of Pleasure*. The Hague: Mouton & Cie, 1967. Pp. 224. DG 25.—.

A philosophical analysis, based upon a doctoral dissertation and using linguistic analysis.

MELVIN MARX

DAVID RIESMAN and EVELYN THOMPSON RIESMAN. *Conversations in Japan: Modernization, Politics, and Culture*. New York: Basic Books, 1967. Pp. xii + 371. \$7.50.

A unique husband-wife journal of a two-month lecture and discussion tour of Japan. The title is apt; the focus is on lively and wide-ranging conversations with Japanese scholars, architects, journalists, students, industrialists, and government employees. It is a daring enterprise that comes off beautifully, creating a picture of contemporary (1961) Japanese culture through perspective reflections on these conversations. Both Riesmans express themselves clearly and, especially important under the circumstances, without pretense or undue defensiveness. Professor Riesman is a keen and comprehensive observer of national life with an unerring gift of asking the right questions. His willingness to generalize, to see genotypical cultural parallels, lifts the book well above the entertaining conversational travelogue that it otherwise would be. Mrs. Riesman's less abundant commentary is also graceful and astute.

EDWARD E. JONES

ROBERT W. WHITE. *Lives in Progress*. 2nd Ed. New York: Holt, Rinehart & Winston, 1966. Pp. x + 422. \$6.95.

The second edition of this widely used casebook is altered primarily by

additional material on two of the subjects, extending their lives into middle age. As an elementary text this volume has two great advantages: the disarmingly simple style is the medium for numerous theoretical ideas, and the focus on normal personalities eliminates some of the "medical students' disease" frequently seen in clinically oriented courses. As a more advanced text, the volume would be helped by the inclusion of some of the original test material in an appendix. The conclusions in certain areas, especially in evaluating the latter lives of the subjects, seems to the reviewer slightly more protective of student sensibilities than absolutely necessary for the current generation.

STEPHEN BINDMAN

BOOKS RECEIVED

ARIETI, SILVANO. *The intrapsychic self: feeling, cognition, and creativity in health and mental illness*. New York: Basic Books, 1967. Pp. xvi + 487. \$12.50.

BAKAN, DAVID. *On method: toward a reconstruction of psychological investigation*. San Francisco: Jossey-Bass, 1967. Pp. xviii + 187. \$7.50.

BARSCH, RAY H. *Achieving perceptual-motor efficiency: a space-oriented approach to learning*. (Vol. 1 of a Perceptual-Motor Curriculum) Seattle: Special Child Publications, 1967. Pp. 365. \$10.00.

BECK, AARON T., MD. *Depression: clinical, experimental, and theoretical aspects*. New York: Hoeber Medical Division, Harper & Row, 1967. Pp. 384. \$10.50.

BELL, NORMAN T. and HUNT, JAMES G. *Self-instructional program in psychology to accompany psychology and life 7th edition*. Glenview, Ill.: Scott, Foresman, 1967. Pp. 264.

BRACKBILL, YVONNE (Ed.) *Infancy and early childhood: a handbook and guide to human development*. New York: Free Press; London: Collier-Macmillan Ltd., 1967. Pp. 533. \$9.95.

BRUTTEN, EUGENE J. and SHOEMAKER, DONALD J. *The modification of stuttering*. Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. xii + 148. \$5.50.

CAREHUFF, ROBERT R. and BERENSON, BERNARD G. *Beyond counseling and therapy*. New York: Holt, Rinehart & Winston, 1967. Pp. x + 310. \$6.95.

- CATTELL, RAYMOND B. and WARBURTON, FRANK W. With the assistance of FRED L. DAMARIN, JR. and ARTHUR B. SWENEY. *Objective personality & motivation tests: a theoretical and practical compendium*. Urbana, Ill.: University of Illinois Press, 1967. Pp. xi + 687. \$20.00.
- CORSO, JOHN F. *The experimental psychology of sensory behavior*. New York: Holt, Rinehart & Winston, 1967. Pp. xii + 628.
- DAVITZ, JOEL R. and DAVITZ, LOIS JEAN. *A guide for evaluating research plans in psychology and education*. New York: Teachers College Press, 1967. Pp. ix + 38. \$1.00.
- DEBOLD, RICHARD C. and LEAF, RUSSELL C. (Eds.) *LSD, man & society*. Middletown, Conn.: Wesleyan University Press, 1967. Pp. xii + 219. \$5.00.
- DICKS, HENRY V. *Marital tensions: clinical studies towards a psychological theory of interaction*. New York: Basic Books, 1967. Pp. xiv + 354. \$10.00.
- GLASSER, ACY. *Extrasensory perception*. New York: Essandess Special Editions, 1967. Pp. viii + 88. \$1.00.
- GOLDSTEIN, ABRAHAM S. *The insanity defense*. New Haven and London: Yale University Press, 1967. Pp. 289. \$6.00 cloth, \$1.95 paper.
- GRAY, PETER. *The dictionary of the biological sciences*. New York: Reinhold, 1967. Pp. xx + 602. \$14.75.
- GROUP FOR THE ADVANCEMENT OF PSYCHIATRY, COMMITTEE ON MENTAL RETARDATION. *Mild mental retardation: a growing challenge to the physician*. (Volume VI, Report No. 66, September, 1967) New York: Group for the Advancement of Psychiatry, 1967. Pp. 583-635.
- HARMIS, ERNEST. With a Foreword by FRANCIS J. BRACELAND, MD. *Origins of modern psychiatry*. Springfield, Ill.: Thomas, 1967. Pp. xiv + 256. \$7.75.
- HAYS, WILLIAM L. *Basic statistics*. (Basic Concepts in Psychology Series, Edward L. Walker, Ed.) Belmont, Calif.: Brooks/Cole, 1967. Pp. viii + 117.
- JENNINGS, BURGESS H. and MURPHY, JOHN E. (Eds.) *Interactions of man and his environment*. (Proceedings of the Northwestern University Conference held January 28-29, 1965) New York: Plenum Press, 1966. Pp. xii + 168. \$9.50.
- KELLY, E. LOWELL. *Assessment of human characteristics*. (Basic Concepts in Psychology Series, Edward L. Walker, Ed.) Belmont, Calif.: Brooks/Cole, 1967. Pp. xi + 114.
- MARGOLIN, REUBEN J. (Ed.) *Curriculum materials developed from a conference on the juvenile court and vocational rehabilitation*. Boston: Department of Rehabilitation and Special Education, Northeastern University, in collaboration with Vocational Rehabilitation Administration, Department of Health, Education, and Welfare. Pp. iv + 97. Single copies free of charge.
- McLEAN, ALAN, MD (Ed.) In cooperation with the National Association of Manufacturers and the Center for Occupational Mental Health, Cornell University Medical College. *To work is human: mental health and the business community*. New York: Macmillan, 1967. Pp. xiii + 306. \$6.95.
- McNEIL, ELTON B. *The quiet furies: man and disorder*. Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. xi + 207. \$5.95.
- MEADE, J. E. and PARKES, A. S. (Eds.) *Genetic and environmental factors in human ability*. (A Symposium held by the Eugenics Society in September-October, 1965) New York: Plenum Press, 1966. Pp. xi + 242. \$12.50.
- MEYER, WILLIAM J. (Ed.) *Readings in the psychology of childhood and adolescence*. Waltham, Mass.: Blaisdell, 1967. Pp. xii + 436.
- MOONEY, ROSS L. and RAZIK, TAHER A. (Eds.) *Explorations in creativity*. New York: Harper & Row, 1967. Pp. x + 338. \$10.00.
- MOWRER, O. HOBART (Ed.) *Morality and mental health*. Chicago: Rand McNally, 1967. Pp. xvii + 669. \$9.00.
- OSGOOD, CHARLES E., SUCI, GEORGE J., and TANNENBAUM, PERCY H. *The measurement of meaning*. Urbana, Ill.: University of Illinois Press, 1957. Pp. 346. \$3.45.
- PATAI, RAPHAEL (Edited and with an Introduction by) *Women in the modern world*. New York: Free Press; London: Collier-Macmillan Ltd., 1967. Pp. vi + 519. \$13.95.
- PAYNE, DAVID A. and McMORRIS, ROBERT F. (Edited and with Introductions by) *Educational and psychological measurement: contributions to theory and practice*. Waltham, Mass.: Blaisdell, 1967. Pp. x + 419.
- PINES, MAYA. *Revolution in learning: the years from birth to six*. New York: Harper & Row, 1966, 1967. Pp. xi + 244. \$5.95.
- ROGERS, CARL R. and STEVENS, BARRY. With contributions from EUGENE T. GENDLIN, JOHN M. SHLIEN, and WILSON VAN DUSEN. *Person to person: the problem of being human: a new trend in psychology*. Walnut Creek, Calif.: Real People Press, 1967. Pp. 276. \$3.00.
- ROSNOW, RALPH L. and ROBINSON, EDWARD J. (Eds.) *Experiments in persuasion*. New York and London: Academic Press, 1967. Pp. xix + 519. \$8.95.
- SCHIEFELBUSCH, RICHARD L., COPLAND, ROSS H., and SMITH, JAMES O. (Eds.) *Language and mental retardation: empirical and conceptual considerations*. New York: Holt, Rinehart & Winston, 1967. Pp. 218. \$5.95.
- SILVERMAN, HIRSCH LAZAAR (compiled and edited by) With Forewords by JOHN H. CALLAN, REBECCA LISWOOD, and DAVID R. MACE. *Marital counseling: psychology, ideology, science*. Springfield, Ill.: Thomas, 1967. Pp. xxxix + 530. \$5.00.
- SMART, REGINALD G., STORM, THOMAS, BAKER, EARLE F. W., MD, and SOMMERH, LIONEL, MD. *Lysergic Acid Diethylamide (LSD) in the treatment of alcoholism: an investigation of its effects on drinking behavior, personality structure, and social functioning*. (Brookside Monograph of the Addiction Research Foundation, No. 6) Toronto: University of Toronto Press, 1967. Pp. xii + 100. \$10.00.
- TEITELBAUM, PHILIP. *Physiology and psychology: fundamental principles and foundations of Modern Psychology Series*. Richard S. Lazarus, Ed.) Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. xii + 218.
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- VON BERTALANFFY, LUDWIG. *Robots, men and minds: psychology in the modern world*. New York: George Braziller, 1967. Pp. x + 150. \$5.00.
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- YARBUS, ALFRED L. Translated from Russian by BASIL HAIGH. LORRIN A. RIGGS, Translation Ed. *Eye movements and vision*. New York: Plenum Press, 1967. Pp. xiii + 222.

In most sciences one generation tears down what another has built and what one has established another undoes. In Mathematics alone each generation builds a new story to the old structure.

—HERMAN HANKEL

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Artificial Evolution of Intelligence

Lawrence J. Fogel, Alvin J. Owens, and Michael J. Walsh

Artificial Intelligence Through Simulated Evolution. New York: Wiley, 1966. Pp. xii + 170. \$9.95.

Reviewed by ROBERT K. LINDSAY

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The reviewer, Robert K. Lindsay, is Associate Professor of Psychology and Research Psychologist at the Mental Health Research Institute, The University of Michigan. He received his PhD from Carnegie Institute of Technology in 1961, spent four years on the faculty of The University of Texas at Austin, then one as a postdoctoral student at Stanford. His research activities center around simulation, artificial intelligence, and climbing trees.

How did nature go about producing such marvelously clever entities as you and I? Presumably by starting with something simple, making small random

changes, and retaining the fittest for further improvements. If that is all there is to it, argue Fogel, Owens, and Walsh, we can do the same thing much faster with a digital computer, and go farther as well. Their book fails to convince me that this hypothesis is correct, and thus suggests that nature had a few more tricks up her sleeve.

After all, such a strategy amounts to random search, a problem-solving procedure which has a compelling and recurring attraction, particularly it seems, among researchers who are impatient with the slow progress and narrow range of theories proposed by cognitive psychologists and heuristic programmers, and are attracted by the generality of random search as an approach to problem solving. Unfortunately, this technique is also the most inefficient method of problem solving, and attempts to capitalize on its generality are frequently a case of out of the frying pan into the fire. I will illustrate with an early example.

In 1958, R. M. Friedberg reported experiments with a learning machine. The machine consisted of a simulated digital computer endowed with a simplified set of instructions, and was presented with the task of devising programs which could perform very simple

operations, such as one digit binary addition. The machine learned by making small, random changes in its program when the program failed to perform properly. Although thousands of trials were required in this evolutionary process, Friedberg demonstrated that his machine could evolve programs to deal with some simple tasks. Shortly thereafter he discovered the embarrassing fact, verified by further simulations, that a better learning strategy existed: rather than make and keep track of small changes in the programs which failed, throw them out entirely and try a completely different, randomly selected program. This is surprising since the latter method is blind search while the former guides its search by experience at each step, and seems akin to many aspects of human problem solving. What is missing here?

A basic shortcoming of the earliest versions of Friedberg's machines can be identified: the programs evolved were not organisms. That is, they were not composed of interacting functional units (i.e., in the case of programs, subroutines) which could be modified or added to with some degree of independence, and combined into hierarchical structures to handle bigger jobs. Instead, each was monolithic, with no noteworthy internal structure. Each new task required starting from the beginning, and small changes in composition led to large and unsystematic changes in behavior. It is the concept of stable substructures which was not addressed by Friedberg, but is one of nature's important tricks. (This point has been ably discussed by Simon, 1962.) Capturing this feature in a simulation of evolution might allow a significant advance beyond Friedberg's work.

The theory of evolution is not typical of scientific theories. Rather than prescribing a specific process or formula it merely provides a plausibility argument involving a couple of general principles and gains broad acceptance by virtue of

the lack of plausible alternatives. In a sense, genetics is the attempt to make more specific the mechanism of evolution as well as of heredity. Although genetics has a long way to go, it is by no means primitive and contentless, and it would seem that many of its discoveries might profitably be examined in an attempt to simulate evolution. In fact, however, the book under review makes no use of even the most standard concepts of genetics, such as gene, allele, chromosome, linkage, crossover, and epistasis. They have not even discovered sex, one of the most potent concepts (and successful strategies) of evolution. Though they argue for their title theme mainly by pointing to the successes of nature, these oversights considerably weaken their claim. Indeed, the specific approach selected by the authors precludes the implementation of these important features. To see why, it is necessary to outline the structure of the environment and mechanisms studied.

THE AUTHORS begin with a statement only a mathematician could love: "For the sake of simplicity, and without sacrificing generality, the environment will be viewed as a sequential source of symbols taken from a finite alphabet." This is tantamount to suggesting that the entire Library of Congress (including the photographs and diagrams) be recoded as a long, binary number in order to make it easier to deal with. One of the dawning realizations from work in artificial intelligence is that an intelligent device must be able to structure its problems if it is to solve them. Homogenizing the environment makes more severe the already enormous task for the organism.

To deal with this environment, the authors selected finite state machines. These are devices which are capable of being in one of a finite number of discrete states at each step in their behavior. When an input is received the machine selects a next state and an output as a function of the input and the machine's present state. Assuming that an organism's components must be in one of a finite number of discrete states is a reasonable simplification, and

although finite state machines are not the most general devices embodying the assumption of a finite number of states (due to an unfortunate but well-accepted terminology), they are capable of very complex and interesting behavior. My objection to using them as a vehicle for this study is that describing a device in this manner obscures its structure. A simple example will illustrate this important point.

Consider a device composed of a heart which can beat at one of four rates (1, 2, 3, or 4) and a gland which can be active or inactive. The environment is a binary sequence in which we may think of 1's as danger signals. If the gland is inactive and the last three inputs were 1's, the gland becomes active, otherwise it remains inactive; if the gland is active and the last two inputs were 0's, it becomes inactive, otherwise it remains active. If the gland is inactive at time t , the heart rate decreases one unit at time $t+1$, with a lower limit of 1; if the gland is active at time t , the heart rate doubles at time $t+1$, with an upper limit of 4. Initially the heart rate is one and the gland is inactive. One might suspect that the state diagram for this simple organism would contain eight states (4 times 2). But since the device must remember the stimulus sequence for two or three steps, more states are required. For no obvious reason, the number of states required is 13. If the reader constructs the diagram, he will find that the components of the system are nowhere to be found. In effect they have been dispersed so that the simple structure of the original organism is not at all apparent. A change in the function of one organ can not easily be reflected in the state diagram, and the effect on the organism of a change in the state diagram can not be easily deciphered. What is perhaps worse, no clue is given as to how this system could be used as a component in a larger system, because the entire diagram would need to be changed as it was merged with the other components. Although there are known techniques for discovering the two components in this state diagram (though not for more complex devices), this does not vitiate the point that this representation obscures that structure.

Given this general but structureless situation, we are left with little choice but to search it at random. Within this framework we have the above mentioned choice, however. We may look for needles in the haystack by jumping

from place to place at random, or we may begin at a random place and look at random in the local vicinity, picking what seems to be the most promising direction for our next step. The relative merit of these two methods will of course depend upon how the needles are distributed throughout the haystack. Clearly neither technique will be better in all cases. It is possible, though, that the evolutionary form of random search may sometimes be dramatical in this context, and the book does provide a test of this hypothesis.

THE BASIC PARADIGM strategy studied may be illustrated by the first simulation reported by the authors. The environment was a sequence of binary digits constructed by selecting an arbitrary string of 12 bits (101110011101 in all cases) and repeating it. The task was to evolve a machine which would predict this environment, i.e., would read the first 1, make a state transition and output a 0, read the next input, a 0, make a state transition and output a 1, etc. An arbitrary five state machine was selected as a starting point. At each step (each digit of input read) new machines were generated from old machines by selecting at random one of the following mutations: add a state, delete a state, change one transition, or change the initial state. The parent machine and each of the machines so generated were tested against the entire history of inputs and the three machines with the best scores were retained for the next step.

An important question which the authors failed to discuss is, "How difficult is this task?" We note that prediction by coin flipping should yield a score of 50% and a constant prediction of 1 will yield a score of 67% for the input used. The authors point out that each of the experiments examined "several thousand" machines and the evolved machines were of eight to ten states. The number of N state machines is

$$N^{2N} \cdot 2^{2N} (= 2^{4N} \text{ for } N = 8),$$

which is a lot of hay. However, we must also ask how densely populated is this space with machines which will perform this task well, and this is a more difficult question. We may obtain a rough idea of the number

of perfect predictor machines by the following considerations. Each machine will produce some 12 digit binary number after its first 12 transitions. Noting that a 100% wrong machine can be converted to a 100% correct machine by complementing the output, we see that the probability is 2^{-12} that the first 12 bits of output from a randomly chosen machine will match a randomly chosen 12 bit environment. Of the eight state machines which are correct on the first 12 predictions, $1/8$ will return to the initial state so that the sequence will be repeated as desired. Thus, the expected number of machines which must be examined by a random search of eight state machines before finding the first perfect predictor machine is $2^{12} = 16,384$ for a randomly selected 12 bit cyclic input. (For the particular environment used in these experiments, this may be in error; the authors could have provided proper baselines for the chosen environment by simulating a random nonevolutionary search, but they did not do so.)

In one of the experiments reported, a perfect predictor machine was discovered after examining fewer than 300 machines, which is quite remarkable. Performance in the other three runs on this task (with different random selections of mutations) is less impressive. To evaluate less than perfect performance, we must know the number of less than perfect machines. If we assume that there are 12 times as many 92% correct machines as there are perfect machines, on the grounds that there are 12 sequences which differ from the input sequence in exactly one digit, and $\binom{12}{2} = 66$

times as many 83% correct machines as there are perfect machines, then the expected length of search for a 92% machine would be 1,365 and the expected length of search for 83% machines would be 248. In the other three experiments, examining several thousand machines, two appear to attain 88% and the other 70%. The authors consider the 88% performers "typical," and if so we see that local random search is not clearly better than any other kind of random search for this kind of problem. Indeed, the authors report better success when several mutations are made at each step.

WHILE it is difficult to find a technique which could do worse, it is not hard to find others which could be expected to do a great deal better. The procedures described by Kochen and Galanter (1958) and by Simon and

Kotovsky (1963) should be readily able to handle such problems. Thus the only claim for this method lies in its generality, which is explored in the remainder of the book. There we find adaptations of the same method to tasks of pattern detection, classification, and control. None of these is handled well, and again no baselines for comparison are presented. I think that it is safe to say that each problem studied could be better solved by selective search procedures adapted to the task. One possible exception is the task of predicting a nonstationary environment, for which no good heuristic procedures readily come to mind. Let's see how the evolutionary procedure fares here.

An example of a nonstationary sequence is 01101010002... wherein each 1 indicates that the natural number corresponding to that position is prime. Of this sequence the authors make the following statement (page 36). "Although in principle this deterministic environment should be perfectly predictable, no finite procedure is known for accomplishing prediction." But the sieve of Eratosthenes is a finite procedure, and therefore their statement is incorrect. By confusing "procedure" with "formula" they give the erroneous impression that their method, which achieves an 82% score on the first 719 numbers, is not doing badly. But after the 203rd number a machine evolved which always predicted 0. Since primes become relatively scarce, their percent correct is quite good, but nowhere do they admit that they are missing all of the information in the sequence! Such sophistry is unfortunately frequent in this book.

Whatever contribution the book might have made is hidden by its style. Those tables which have captions have cryptic captions (e.g., "Machine N"). Descriptions of procedures are too incomplete to allow careful study (exactly what happens when a state is added by mutation?); tailoring the procedure to the task is passed off as indicative of its versatility; and results are vaguely reported ("several thousand machines," "eight or ten states," etc.). Particularly cryptic is the basic form chosen to present results. Although the procedure for the construction of these graphs is not given, I believe it works as follows. The number of digits of input experienced by the system is plotted on the

abscissa. The cumulative performance of the system is plotted on the ordinate. Thus the graphs do not reflect the adequacy of any one machine, nor the performance the then current machine would have achieved over the input sequence up to that point. Further, if a perfect machine is evolved after the twentieth step, and performance had been 50% (10 wrong) up to that point, this is reflected not as a sudden jump in performance which could be seen readily, but as a smooth increasing curve approaching asymptote of 100%, since e.g., after 200 steps the score still reflects the 10 errors in the first 20 steps, hence is 95%. Such a curve gives the casual reader the impression of continuing, gradual learning.

BUT even if the above list of shortcomings in results, ideas, and reporting were not valid, the book would still be offensive to most readers because of its evangelical style. Other work in artificial intelligence is summarily dismissed. The criterion chosen for evaluation of results is that the system must exceed all men in demonstrated intelligence, and when their procedure fails to solve, for example, simple pattern recognition tasks, the authors point out that "in many situations it is of far greater importance to detect similarities that lie beyond human ability" and indicate that they will plunge ahead unruffled. They constantly refer to amazing success when the failure is glaring. They include lengthy mathematical asides ranging from trivial explanations of the construction of an input sequence to several irrelevant pages on recursive function theory. The penultimate indignity is a chapter in which the scientific method is described as an evolutionary process and hence mechanizable with the procedures described. "If 'creativity' and 'imagination' are requisite attributes of [the scientific method], then these too have been realized."

And the ultimate indignity? A lecture on political-social philosophy and the responsibilities of the citizen. "The greatest benefit to all mankind can only be derived through freedom of the individual to select and pursue his own goals, so long as this activity does not

infringe upon the rights of other individuals. Only through a decentralized decision-making organization can this status be maintained. For such a nation to survive, the 'man on the street' must assume responsibility for learning about his environment, about himself, and about what can be achieved through artificial intelligence. Technology benefits only those who prepare for it."

Such fustian may unfortunately alienate many psychologists from the important work being done in artificial intelligence, as well as from further exploration of the possibilities of simulating genetic mechanisms which could carry this very general notion beyond the limited results of this book.

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The reviewer, Irving Zucker, is Assistant Professor of Psychology at the University of California, Berkeley. His 1964 PhD in biopsychology is from the University of Chicago. He did post-doctoral work in reproductive physiology and behavior at the Oregon Primate Center and in neurochemistry at The University of Wisconsin Medical School. He is conducting research on sex and the single cell and mechanisms of female sexual receptivity in rodents.

STUDENTS of human motivation and biological rhythms might well direct their attention to the publishing habits of physiological psychologists; the former to determine why so few texts on physiological psychology appeared between 1950 and 1965 and the latter to discover the entraining stimulus responsible for the recent onslaught of books on the subject, and the initiation of what promises to be a cyclic phenomenon.

The editor of the volume under review has collected 41 papers ranging in subject matter from schizophrenia to sensory physiology; almost all the reports were originally published in the 1950s and early 1960s. The papers are somewhat arbitrarily divided into 11 sections, with major emphasis devoted to learning and memory, where, according to the editor, "excitement is currently most feverish." Less extensive coverage is provided for the areas traditionally identified as motivation, sensation and perception, and development.

In general, the selection provides few surprises; many of the reports are included in earlier sets of readings and almost all of the material is discussed in detail in one or more of the recent textbooks of physiological psychology (see for example the books by Altman, Grossman, and R. F. Thompson published in 1966-67).

More than a few of the problem areas currently of interest to physiological psychologists are either totally unrepresented or covered by outdated or tangential papers. This is particularly true of reproductive behavior, social behavior, invertebrate learning, limbic system and behavior, early experience, and ontogeny of behavior in mammals.

Granted that most of us are busiest when teaching material relevant to our research interests, the omission of so much material currently in print will probably restrict usage of the book.

WHAT is the *raison d'être* of this collection? According to Landauer, exposure of students to the raw material of which texts are made should foster skepticism of grand conclusions, as well as generate excitement. Evaluated by these criteria the book is moderately successful; it certainly contains some of the more eye-catching and controversial research to appear of late. It should find limited use as supplementary text. Its usefulness may be short-lived, however, since texts (mentioned above) appearing in print at about the same time are probably more up-to-date in coverage.

The editor believes that a collection of readings may also be useful on its own as a text in physiological psychology. This seems doubtful to the extreme, since there is no attempt at synthesis and no integration of various sections into anything resembling a conceptual framework; less than half the papers are preceded by introductory notes and these are usually more than a sentence or two in length.

One can sympathize with the editor; it is difficult to collate a book of manageable size that is likely to satisfy the needs of more than a handful of instructors. The recent trend of providing a large number of unbound papers, from which the individual teacher may select those pertinent to his course appears to be an attempt to solve this problem.



And just as our body in a healthy condition knows and notices nothing of what happens inside it to the food and air which has been taken in, so also is the internal psychological process of assimilation under ordinary conditions unnoticed, unconscious, and only recognizable through its results.

—G. H. V. SCHUBERT (1780-1860)



Biology and Behavior

Thomas K. Landauer (Ed.)

Readings in Physiological Psychology: The Bodily Basis of Behavior. New York: McGraw-Hill, 1967. Pp. xii + 584.

Reviewed by IRVING ZUCKER

The editor, Thomas K. Landauer, received a 1960 PhD from Harvard University and taught at Dartmouth College before moving to Stanford University, where he is Assistant Professor of Psychology.

Man is Born to Speak

Eric H. Lenneberg. With appendices by Noam Chomsky and Otto Marx

Biological Foundations of Language. New York: Wiley, 1967. Pp. xiv + 489. \$14.95.

Reviewed by JOHN B. CARROLL

The author, Eric H. Lenneberg, received his PhD from Harvard University in 1956 and worked for the Russell Sage Foundation, has been connected with both the Children's Hospital and Harvard Medical School in Boston. He is now Professor of Psychology at the University of Michigan. He is editor of *New Directions in the Study of Language*.

The reviewer, John B. Carroll, a Minnesota PhD, was until recently Professor of Educational Psychology at Harvard. Now he is a Senior Research Psychologist at Educational Testing Service in Princeton, where he plans to concern himself further with the psychology of native and foreign language learning.

BEHAVIOR takes place and is modified in an organism. Lenneberg's initial thesis is that when behavior is as complex and varied as that associated with language, it is profitable to consider the biological nature of the organism and the potentialities and constraints that are thereby implied for the development of behavior. Starting from this thesis, he has written an extraordinarily careful review and interpretive discussion of what is known about the biological substrate of human language. He insists that it is a "discussion" rather than a "presentation," for the "exact foundations are still largely unknown" (p. viii). Nevertheless, he gives us a very meaty presentation of the observed facts, and then, in the final chapter, a persuasive theoretical point of view.

Lenneberg has assembled a wealth of evidence for thinking that language is

biologically specific to human beings. As far as he is concerned, investigators who attempt to teach anything like human language to subhuman species are wasting their time, for among other things they are up against the fact that such species do not possess the neurological equipment to enable them to categorize and formulate their experience in the way human language requires. The analysis of human languages shows them all to have certain unique underlying properties in common, and this suggests to Lenneberg that the very nature of human language is biologically determined. While it is clear that a child must acquire (presumably by mechanisms of learning) the specific features of whatever language he learns as his mother tongue, the processes by which this acquisition takes place are innate. These innate mechanisms are "programmed into the ontogenetic process" as a part of the biological unfolding of the human organism. Lenneberg feels that there is nothing unscientific about such a claim and that, in fact, it is a natural consequence of a fully mechanistic view of the organism. The behavior of every animal must be in part "dependent upon the ways in which it is internally wired, so to speak" (p. 11).

It would be a mistake, however, to conclude that Lenneberg believes that language—even certain universal properties of language—is "wired into" the organism; what he claims is that certain language acquisition mechanisms are biologically given. He is unable to identify these beyond general descriptions of certain modes of perception, categorization, and transformation. For

the present, one must tolerate a certain degree of vagueness in Lenneberg's exposition. For example, he introduces the metaphorical concept of "resonance" to explain the way in which the child seems to respond to the presence of adult language by somehow absorbing selected aspects of that language. This metaphor may be poetic, but it is not very instructive. Still, we must remember that it is only in very recent years that really sophisticated and detailed studies of child language acquisition have been undertaken (sophisticated, that is, in terms of contemporary linguistic theory). Lenneberg utilizes some of these studies, but research is proceeding at such a fast pace that his review of them is already somewhat out of date.

THROUGHOUT much of the book, stress is put upon the relevance of genetic, anatomical, and physiological correlates of language phenomena. Both normal and pathological conditions are treated: the author convinces us that pathological conditions do not as a rule involve greater complexity of behavior, but often constitute "natural experiments" that reveal with great clarity what variables are or are not operative. For example, observations of nanocephalic dwarfs show that, contrary to the traditional opinion, brain size *as such* is no index to language development. I am not personally competent to evaluate to what extent Lenneberg's review of anatomical and neurological studies is accurate or up-to-date, but his interpretations and judgments all seem reasonable. One of his more interesting conclusions is that the motor aspects of speech production are governed by a train of elementary neurological events with a frequency of about six per second. Superimposed upon this train, however, is an enormously complicated firing mechanism which must certainly be centrally controlled, because it must plan for smoothly integrated activity of disparate units that require different innervation times. Lenneberg agrees with Lashley that no simple chain-association theory can account for speech motor activity. There is an interesting parallel to this, he points out, in the planning of the content of utterances, for whatever

mechanism is involved must have the capacity to array or to rearrange a set of interrelated elements in what is sometimes a long temporal sequence.

Studies by Gesell, McCarthy, and others have made it amply clear that language development shows all the characteristics of a maturationally-dependent behavior. Lenneberg adds much new evidence to the picture, however, postulating also that there is a critical period for language development that starts around two years of age, when adequate physical maturity is attained, and ends around twelve, when a loss of flexibility for cerebral organization sets in. Whether this "critical period" is in any way similar to critical periods for imprinting found in lower animals is not clear, but Lenneberg points out that the concept of a critical period for language learning should not be surprising from a biological point of view. He is careful to note, however, that his hypothesis applies only to the seemingly "automatic" learning of the native language (or of another language learned concurrently); he suggests that learning of foreign languages after puberty may be qualitatively different from first language acquisition.

The notion of a biologically determined lower age limit for first language acquisition would, I think, be accepted by all but the most extreme behaviorist. The evidence for a *biologically* determined upper age limit on a certain manner of language acquisition is not so clear. It rests primarily on observations of the poor prognosis for language learning in the unharmed hemisphere in aphasics beyond puberty. A counter-theory would be that the apparent loss of cerebral flexibility is due solely to the accumulation of well-formed habits that interfere with efforts to establish new habits of foreign pronunciation, say, or for the matter, with efforts to learn any new skill, violin playing, for instance. Many of the things that can be said about a critical period for language acquisition can also be said about such performances as virtuoso violin playing, master chess playing, etc. It is unlikely that human evolution has provided for these learnings in quite the same way that is claimed for language learning,

even though undoubtedly there is a biological substrate for these skills.

SOME of the arguments for a biological substrate for language behavior depend upon the assumption that there are universal characteristics of language. There is hardly any doubt that such universal characteristics can be identified; one must exercise some caution, however, in inferring that these are biologically dependent. There are also universal features of human number systems, economic systems, etc., but many of these may depend more upon logic or "the nature of things" than upon human capacities. Even Lenneberg remarks (p. 381) that "all languages are concerned with essentially similar aspects of the environment," implicitly an admission that some universal characteristics of language may arise from characteristics of the human environment rather than of the human organism. Nevertheless, the essential interest in the claim that certain aspects of language are biologically dependent is the implied challenge to discover which aspects these are.

Mention of the environment leads me to the observation that although the principal aims of this book have been admirably achieved, many readers, particularly those with interests in learning or education, will find the book one-sided. It is a maxim in psychology that observed behavior, in the broad sense, is a resultant of the interaction of biological and environmental factors. Without really overstepping his self-imposed limits, Lenneberg could have benefited the reader by giving more consideration to environment and learning. Surely there is a sense in which the child "learns" the particular features of a language in the process of "acquiring" it. Indeed, Lenneberg remarks that language emerges "by an interaction of maturation and self-programmed learning" (p. 158). What is the nature of this "learning"? If we are ready to agree with Lenneberg that words are labels for biologically-determined categorization processes, how are these words learned? And if we assume, with Lenneberg, that grammar is acquired through a biologically-fundamental "differentia-

tion" process (an idea that can, incidentally, be traced at least to the French psychologist Guillaume in the 1920's), how are these differentiations learned? If strict behavioristic models fail to account for language acquisition, what new principles of learning can be advanced?

ON the other hand, this is much more than a book on biological foundations of language. It contains excellent treatments, often with new research evidence provided by the author's own studies, of a number of problems in psycholinguistics that have only tenuous connections with biology. On the problem of "linguistic relativity," Lenneberg inclines to be quite tentative, pointing out that in the limited area—the "language of experience"—where propositions about linguistic relativity can be properly tested, different languages have been shown to have interconvertible means of expression. One can agree with him that claims about the non-translatibility of terms between languages have been extravagant, without denying that there are also certain semantic areas in which translation remains a formidable problem. On another subject, the nonnecessity of "response learning" in language acquisition, Lenneberg provides voluminous case history data on a child who acquired language understanding without speaking. Although this case history is presented as a challenge to extreme behavioristic accounts of language learning, I can imagine that some behaviorists might take it in stride by appealing to theories of discrimination learning. But even such an account would probably be very incomplete.

Chomsky's appendix on the "formal nature of language" is an excellent summary of his theory of transformational grammar—a theory, however, that in its details is still in a state of development. Lenneberg and Chomsky do not always agree in terminology: while Lenneberg states that in language acquisition "what is acquired are patterns and structures" (p. 281), Chomsky wants to reject the view that "the speaker has a stock of 'patterns' in which he inserts words or morphemes"

(p. 400). In principle, however, Lenneberg's exposition is very much in line with transformational theory. Chomsky, in his hypothesis that certain linguistic principles *as such* are possibly not learned at all, may have gone even further than Lenneberg in grafting linguistics into biology. Marx's appendix on the history of the biological basis of language is scholarly but necessarily rather sketchy.

Lenneberg is to be complimented on having written a highly readable book. Despite an abundance of technical detail and subtle reasoning, the conclusions emerge clearly and elegantly. His use of tabular summaries of facts and arguments is particularly worthy of emulation.

Problems in Adolescent Treatment

Peter G. S. Beckett

Adolescents Out of Step: Their Treatment in a Psychiatric Hospital. Detroit, Mich.: Wayne State University Press, 1965. Pp. 190. \$6.95.

Reviewed by NICHOLAS HOBBS

The author, Peter G. S. Beckett, is a Professor in the Wayne State University College of Medicine. He graduated in 1945 from the University of Dublin School of Physicians, Trinity College. He is certified by the American Boards of Psychiatry and Neurology, and is a member of the American Psychiatric Association.

The reviewer is Nicholas Hobbs, and everybody knows who he is.

THIS is a book about the established conception of how mentally ill adolescents should be treated and as such it reflects all the limitations of model,

hospital-based treatment programs. It is not a story of the miserable wards of Central Stage Hospital, Anystate, but is an account of what happens in one of our better institutions, the inpatient, adolescent service of the Lafayette Clinic in Detroit. It is a credible account of the incredible. Yet it is not fair to blame the author. Given the system we have, he outlines clearly and with good humor what it takes to make the system work.

The problem dealt with is how to make adolescents behave themselves in a hospital. This is called the replacement of external controls by internal controls. It is done by taking away privileges for misbehavior and giving privileges for docile behavior. The patients go up and down a staircase, starting from 5 (open ward—no privilege), maybe dropping to 1 (seclusion), and hopefully climbing up to 9 (discharge), according to how well they conform to expectations that are set for them by the staff. It is all done just as Goffman (*Asylums*) says, but with a certain elegance and refinement. What is provided here is a handbook for establishing a total institution.

Individual psychotherapy ("the backbone of modern psychiatry") is the real way to change behavior but you somehow have to keep the kids from tearing out the airconditioning while waiting around for treatment. School, O. T., R. T., etc., take up some of the time but mainly serve to test where the boy or girl should be on the ladder. "No plan for behavioral management can be formulated without knowledge gained in therapeutically oriented interviews, and changes in behavior are likely to be slow until interpretations of resistance and of current relationships with staff, including transference relationships with the physician, have been made." If this is true, we may as well throw in the sponge in trying to mount a national mental health program for children. There simply are not enough physicians to go around. In this establishment, the physician has responsibility for formulating the treatment plans and for seeing to it that they are carried out by ancillary personnel; all major decisions are referred to him. The most poignant section of the book describes how isolated and beleaguered he feels at the

apex of this now archaic pyramid. But enclosed in parentheses is a refreshing hint of possible fallibility: "If a staff member 'goofs,' it should be possible to deal with the mistake plainly and clearly. (This includes physicians)." The validity of the acutely pyramidal organization is not questioned.

THERE is in the hospital a committee made up of patients with privileges, the ones who have the hang of the system. They are responsible not for setting goals nor for planning a program but for "the supervision of behavior of patients on the ward, although this responsibility should be carefully specified so that it covers only minor disturbances." The problem is that the adolescents themselves apparently have little part in setting goals and that concern for their development is confined to their conduct in the hospital. The up and down ladder stops at the exit door.

Missing is an appreciation of young people and of their genuine role conflicts in contemporary society. Their problems are defined mainly in intrapsychic and somewhat in intrafamilial terms. The bibliography on adolescence is hackneyed and skimpy, with saving references to Coleman and Salinger, one each. Anent the problem of controlling pornography on the wards, the author says: "The writings of James Joyce, D. H. Lawrence, and Henry Miller come to mind as classic examples [of literature or pornography] . . . The chief of service may have to read the novels himself and make up his own mind . . ." A good idea. And one might add to the list, to help anyone get an inkling of why many adolescents are out of step and what might better be done to help them: Erik Erikson, Albert Camus, Paul Goodman, Edgar Friedenberg, Robert White, Michael Harrington, John Holt, Jack Newfield, and, yes, J. R. Tolkien, and Winnie-the-Pooh.



Experimenter Behavior

Neil Friedman

The Social Nature of Psychological Research: The Psychological Experiment as a Social Interaction. New York: Basic Books, 1967. Pp. xiv + 204. \$6.95.

Reviewed by DARWYN E. LINDER

The author, Neil Friedman, received his PhD under Rosenthal at Harvard and is listed in the 1967 APA Directory as an Assistant Professor at Miles College.

Darwyn E. Linder received his PhD in 1965 under Elliot Aronson from the University of Minnesota. He has been at Duke since then where he is Assistant Professor of Psychology. He is an experimental social psychologist interested in experimental design and methodology. He does research in the areas of interpersonal esteem, social perception, and attitude change.

ONE PURPOSE of this book is to point out that psychological experiments are social interactions between an experimenter and a subject, and that the experimenter cannot be regarded either as a non-stimulus or as a constant stimulus. A second aim is to use this knowledge to force psychologists to adopt a new epistemology based on an awareness that the experimenter contributes to the variability of subjects' responses.

The author accomplishes the first aim by taking a long, careful look at the behavior of 19 experimenters conducting Rosenthal's person perception task in an experimenter bias study. In these studies, experimenters are told to expect that a subject's ratings of whether a person in a photograph has been experiencing success or failure will average around either +5 or -5. That these expectations affect the data the experi-

menter collects has been well documented, but how experimenters do it has not. Friedman obtained sound films of the 19 experimenters contacting 53 subjects, each experimenter expecting an average of +5 for some of his subjects and -5 for others. Observers who did not know the experimenter's expectation looked at each interaction, rated the experimenter's behavior and appearance, timed the various facets of the procedure, and assessed the accuracy with which the experimenter read the instructions.

Is the experimenter a constant stimulus? No. But textbook idealizations and formal reports aside, who could have expected 19 untrained, relatively uncoached experimenters to present themselves in a standard manner? Friedman's descriptions, however, eloquently portray the surprising range of variation. Are these variations in the experimenter's behavior systematically related to the subject's responses? This is really two questions. The simplest of these is to ask if this variability is related to the subject's mean photo rating score, ignoring the expectation of the experimenter. The answer is yes. There are significant correlations indicating that the more often the experimenter glances at the subject, and the more glances he exchanges with the subject *while reading the instructions*, the more positive the subject's mean photo rating. Also, the longer the experimenter takes to read the instructions and complete the rest of the procedure, the more positive

the subject's responses. This is an experimenter effect, not experimenter bias and as Friedman recognizes, it is of more concern to those investigators involved in parameter estimation, mental testing, or clinical evaluation than to those conducting experiments in which the purpose is to show a difference between conditions. Furthermore, within-experimenter variability on the responses that correlated with mean photo rating tended to be small relative to between-experimenter variability.

THIS brings us to the second and more complicated question, is the experimenter able to obtain data congruent with his expectations? Rosenthal's program of research has shown that in a variety of circumstances the answer is yes. But only in a very few studies, including the one that Friedman has scrutinized in his book, have expectancies been varied *within* experimenters. So the question to be asked is, if the same experimenter can obtain data congruent with divergent expectations, does his behavior vary systematically from one expectation condition to the other? Unfortunately, Friedman addresses himself to a different question. The question he asks, and answers affirmatively, is: if some experimenters are better biasers than others, are there correlated *between-experimenter* differences in behavior? He finds that the more accurately the experimenter reads the instructions and the less often he exchanges glances with the subject while reading them, the better a biaser he is likely to be. Two things are important to note. First, that the important variations in experimenter behavior occur while the experimenter is reading the instructions. But second, since exchanged glances and accuracy of reading correlate with an independent rating of professionalism, it is the most professional appearing experimenter who is the best biaser. It is also important to note that these results do not indicate how an experimenter transmits his biasing message, but rather demonstrate an apparently necessary condition for such transmission.

That bias can occur, and that a professional demeanor is a necessary con-

dition for its occurrence, are striking facts. Armed with them, one can seriously question the validity of a number of psychological experiments. But, armed with these findings, one can also design experiments so that experimenter bias may be avoided. And this brings us to the question of a new epistemology for psychology. Increasingly, in the last few years, experimenters have included bias controls in their designs. These have included the experimenter remaining unaware of the condition being run, running all conditions simultaneously, and so on. Furthermore, a great number of the variations reported by Friedman resulted from direct transgressions of the instructions given to his experimenters, and with proper training and surveillance these could be eliminated. Another class of variations involved paralinguistic (timing, emphasis, etc.) and kinetic differences. Much of this behavior could, in principle, be standardized. Probably, such standardization would result in all experimenters attaining the professional appearance that seems to be a prerequisite for bias. However, a professional appearance may also be necessary in order to insure that the subject becomes engaged by the experimental procedure. It would seem to the reviewer that with more careful standardization of experimenter behavior, and the use of 'bias control' designs of the kind mentioned above we are equipped to deal with the problems raised without the introduction of what might be called a new epistemology.

But experimenters, after all, are different people, and in some ways can never be standardized. Friedman would argue, then, that experimenters should be representatively sampled to randomize biases and therefore increase the validity of the results, and to investigate the "trans-experimenter generality of the results." The reviewer would argue that there are better ways to control bias than randomization. But what of trans-experimenter generality? Is it not possible that experimenters, even when unaware of the condition being run, influence the results they obtain? One has to agree, but now we are again dealing with

experimenter effect, and the most likely experimenter effect is variation in the size of between-condition differences, including some experimenters who will find no difference. From Friedman's viewpoint experimenter effects are inextricably interwoven with the experimental problem under investigation. It can be argued, however, that while experimenter effects are a social psychological phenomenon and worthy of study in their own right, psychology can move forward on the results obtained and replicated by skilled experimenters. From this viewpoint the important requirement is that the experimenter has the ability to create the conditions necessary to test his hypothesis. Thus, one can study the determinants of experimenter skill as a psychological problem, but one can also rely on the findings of skilled experimenters conducting and replicating well designed studies.

Needless to say, this is a provocative book. While the reviewer has disagreed with the author at many points, the confrontation has been stimulating and valuable. Those who read the book will very likely become more skillful, or at least better informed, experimenters because of the experience.

A Human Relations File for Clinical Case Records

John Bolland, Joseph Sandler *et al.*

The Hampstead Psychoanalytic Index: A Study of the Psychoanalytic Case Material of a Two-Year-Old Child. New York: International Universities Press, 1966. Pp. xiii + 205. \$4.50.

Reviewed by J. R. NEWBROUGH

Both authors, John Bolland and Joseph Sandler, are associated with the Hampstead Child Therapy Clinic, London. Bolland is Medical Director and

Sandler is Chairman of the Index Project and also Senior Lecturer in Psychopathology, The Middlesex Hospital Medical School.

The reviewer, J. R. Newbrough, has training in clinical psychology and community mental health. In collaboration with John A. Baldwin he developed an information storage and retrieval in community mental health literature for a joint project between the Mental Health Study Center, NIMH, and the Department of Mental Health, University of Aberdeen Medical School. He is currently Associate Professor of Psychology at George Peabody College in Nashville.

THIS BOOK is about documentation as the clinician thinks of it. The clinician usually wants thorough and systematic information about cases so that the entire process can be understood by others. In contrast, the information specialist is much more "means" oriented with systems analysis and flow diagrams showing the process of acquisition, indexing, storing, and retrieval. In both cases, however, the problem is the same; the describing of material, storing it away, and finding it again when needed.

The Hampstead Psychoanalytic Index is an ambitious attempt to organize case records so that they would be more useful to practicing clinicians and so that they could be appropriately retrieved for research purposes. It has two parts: a section on general case material and a section on subject matter headings (utilizing psychoanalytic concepts). The indexing is detailed and complicated, requiring written manuals to explain the procedure as well as considerable training and close supervision.

The book presents a detailed view of a very interesting case. It is organized chronologically in weekly reports, and analytically by selected subject matter areas. As a complete case presentation it is exemplary. But it was disappointing that so little of the system showed through. On the one hand it was not clear how the system actually works. The reviewer longed for some systems diagrams and flow charts. On the other hand there was nothing shown of the comparative capability of the system.

The Index is organized for comparison of cases along subject matter dimensions (such as ego, instinct, object relationships, fantasies and symptoms) but this was not done. Inclusion of such material in Part II could have properly demonstrated that aspect. These faults are with the incompleteness of presentation. It is to be hoped that the presentation of the Index is completed by publication of examples of cross-case comparisons and a procedures manual, for the entire project is a contribution of considerable proportion.

ORGANIZING and retrieval systems are as old as libraries. In the late nineteenth century comprehensive clearinghouses of knowledge were attempted. They foundered on the lack of a technology. Now with computers the technology has become appropriate to the task. In developing applications for the computer a new philosophy of indexing was developed based on concepts of functionalism (M. Taube in J. Shera and M. Egan, *Bibliographic organization*. University of Chicago Press, 1951). Rather than organizing terms hierarchically, they were considered as equal in value and coordinated (compared for applicability to the same material). Increasingly specific searches could be done by coordinating more terms. This was introduced to psychology by Broadhurst (*American Psychologist*, 1962, 17, 137-142) who showed the applicability of Coordinate Indexing to specialized collections. The Hampstead Index does not seem to operate on these principles although the organization seems eminently suited for them, and this would make it more generally applicable.

The Index can be regarded as a kind of Human Relations Area File approach to clinical case records. It offers a timely solution to the problem of organization of the records of a service agency so that they are useful for many purposes. This will become increasingly critical in the era of comprehensive and coordinated care where records retrieval for treatment and program evaluation purposes will be integral to the new services. Applications of it based on computer technology can aid in streamlin-

ing the work so that large case loads could be indexed. This could provide a very large pool for the selection of special kinds of groups and cross-comparisons.

Angels vs Underdogs

Nathan W. Ackerman

Treating the Troubled Family.

New York: Basic Books, 1966. Pp. xii + 306. \$7.50.

Reviewed by ERIKA CHANCE

The author, Nathan W. Ackerman, is Clinical Professor of Psychiatry, College of Physicians and Surgeons, Columbia University; Director of the Professional Program at the Family Institute, New York; and Visiting Lecturer, Albert Einstein College of Medicine. He is a pioneer in the field of family diagnosis and therapy and has published extensively in this area since 1956.

The reviewer, Erika Chance, is both a psychologist (PhD Stanford) and a psychiatric Social Worker (London School of Economics and Political Science). She has written about Families in Treatment (*Basic Books*, 1959; CP, 1960, 5, 264). Currently she is in private practice and very much engaged in teaching psychotherapy in a wide variety of clinical and community facilities.

IN THIS VOLUME theoretical reconstructions of family dynamics are interspersed with verbatim excerpts of family treatment sessions. The clinical and theoretical presentations appear somewhat loosely linked. In the latter the reader, on several occasions, experiences a feeling of 'déjà vu.' On other occasions, however, as when the author relates degree of pathology in a family member to the extent to which the family accorded him permission to develop, one hopes that such constructs will lead the way in new research designs.

Among the many difficult problems which the author presents in the Preface, this book probably deals most successfully with the description of what actually occurs in a family therapy. Dr. Ackerman gives the reader a very vivid picture of the encounter between patient family and therapist(s) by presenting verbatim excerpts from sessions representing different kinds of family pathology. The technique of placing the record of interaction on the left half of the page and the therapist's descriptive, interpretative and explanatory comments on the right, is an extremely effective way of involving the reader. Will he enroll on the side of the angels and of the therapist in the struggle with family pathology? Or will the reader join the underdog—the patient who senses in Ackerman's terms have to be "tickled?" To a large extent this will depend on the reader's temper and philosophy of treatment.

CLINICIANS who still prefer the long, slow road of collaborative work with patients to current fashions of impact-therapy, may experience some empathic shock in reaction to the massive weight of the therapist's value system as it is used in the struggle to loosen up the interlocking defense systems of members of the family. To this reviewer, too, the author's "tickling" techniques sometimes appeared to employ a rather heavy, blunt instrument. No matter whether the reader agrees with Dr. Ackerman's therapy, there is no doubt that he will feel it on reading the text.

Perhaps one defect in this vivid portrayal of the clinical battlefield is the feeling that we know too little about the place of the fragment presented in the course of the ongoing long-term therapy. The fate of the patient family following the illustrative session is disposed of in little too cavalier a fashion with a reference to abatement of symptoms (p. 162). It is to be hoped that in his next book the author may give us a time sample of the treatment process for at least one case, so that the reader could get a feeling for changes in family interaction. Similarly, for the teaching and learning of this technique, it would be helpful if one could differentiate

among the therapist's comments between recall of feelings experienced in the process of the interaction and those gems of hindsight which occur for all

of us only after the hour is over. It is clear from the above that this reviewer looks forward to many another volume from Dr. Ackerman's pen.

Mythology, Ritual and Royalty

John Weir Perry

Lord of the Four Quarters: Myths of the Royal Father. New York: Braziller, 1966. Pp. xvi + 272. \$6.95.

Reviewed by JAMES KIRSCH

The author, John Weir Perry, is a psychiatrist and analytical psychologist in San Francisco, and clinical professor at the University of California Medical Center there. He is also President of the C. G. Jung Institute in San Francisco. He received his medical degree from Harvard in 1941 and subsequently spent three years in China with the Friends Ambulance Unit doing war surgery and general practice in rehabilitation work. He met Jung in 1936, trained with him in Zurich from 1947 to 1949.

The reviewer, James Kirsch, is an analyst in private practice in Los Angeles, former president of the C. G. Jung Society in LA and also a former lecturer at the Jung Institute in Zurich. After receiving his medical degree in Heidelberg, Germany, he went into private practice as an analyst, and was in close contact with Jung from 1929 until his death in 1961. He was instrumental in the founding of the Institute in Zurich. He has published on analytical psychology chiefly in connection with literary figures, the most recent being Shakespeare's Royal Self (CP, 1967, 12, 136).

C. G. JUNG's outpouring of new ideas, especially his concept of the archetype, and the resulting hypothesis of the totality of archetypes as the collective unconscious, has found fertile soil in the mind of John W. Perry. In

his work with psychiatric patients he frequently encountered symbolic figures in their unconscious productions which represented archetypal patterns in rather pure form. He found his patients talking about kingship and its ceremonial accompaniments: cosmic combats, the time of creation, death and renewal, and marriage with a deity and birth of a divine child. After reading Mircea Eliade's *Myth of the Eternal Return*, he considered it quite possible that the complex ritual of renewal in the seasonal festivals of archaic times was composed of the same elements as the reconstitutive process in the psyche, the one faithfully mirroring the other.

In his latest book, *Lord of the Four Quarters*, which is the fourth in the series, *Patterns of Myth*, Dr. Perry studies the mythology and the rituals of archaic kingship of practically the whole planet, brings out not only their archetypal features but also their specific and individual variations, as they grew out of those archaic societies, or formed them. He shows an amazing familiarity with practically all the relevant studies of thirteen archaic cultures. His scholarship is encyclopedic. It is not merely an enumeration of facts, nor an abstraction and simplification of complicated ideas. His penetrating understanding of these myths enables him to describe them clearly and trace their historical significance in the development and decay of divine kingship.

The book contains a list of thirty-two black-and-white illustrations, emphasizing the main themes of his thesis. At times the accumulation of material is overwhelming, but the fascination of the living myth imparts a lively quality to his extremely concise writing. He demonstrates that the archetypes are living organs of the psyche and also create the social and religious life of tribes and larger social structures.

It appears that in many parts of the world primitive societies were ruled by headmen who served as the governing body for a Divine Woman or Queen, who personified the Great Mother and presided over a matrilineal society. Dr. Perry selected an era in which the archetype of the Royal Father evolved and replaced that of the Mother archetype. The tribal Father became, as the first Semitic king, Sargon of Akkad, called himself "Who Rules the Four Quarters," and his son and successor, "King of the Four Quarters." Furthermore, the King became the head of the priesthood, the judiciary and the military. An order developed which was primarily a cosmological matter. The principle of order was formulated as *Maat* in Egypt, *Rita* or *Dharma* in India, or *Tao* in China. The King was largely identified with Nature; the natural processes were reflected in those of the King. The fertility of the country depended on the strength and health of the King. Besides, there always existed a mythical, ancestral king who was the First Ancestor-Founding King, somehow the embodiment of life potency from whom the present king descended.

Associated with the Royal Father were other archetypal motifs like the Tree of Life, the Water of Life, the Garden of God or Paradise, the Divine Bull, the Serpent—which properly belonged to the Mother but were now serving the Royal Father. The cosmological order was regularly arranged in the form of a quadrated circle. Cities like Rome and Baghdad were built as round and quadrated cities. The center of the circle was always the place of death and birth in the rites of renewal. Intense power was concentrated in the center, which as a rule also established a connecting link between the three planes of existence, the sky world, the world of man, and the underworld.

Dr. Perry shows how the Father figure developed step by step from leadership in the clan community to full-blown sacral kingship. In this process the King himself became the center of the cosmos

and received all the worship due it. This was possible because the archetype of the Royal Father was incarnated in the social system of archaic man. Following Jung, Perry defines archetypes as systems of preparedness which are at one and the same time emotion and image, the affective experience and the picture of its meaning, inner events expressed in the visual language of outer ones.

In a society in which the archetype of the Royal Father is fully differentiated, a mythology is developed in which there is a sky world above from whence order comes and puts righteousness into effect. Clarity, illumination and rationality rule. The Sky Father remains aloof and remote, while the feminine principle is considered darkness, chaos, and death, yet is always accompanied by the life-principle. Within the realm of the Mother, there is, characteristically, a monster who personifies the Nether Waters. It is in Perry's accompanying psychological definitions of many archetypal patterns that the great value of his work lies—for example, when he diagnoses these Nether Waters as the psyche's affectivity or emotional vitality, that libidinal dynamism whose source is at the base of the entire psychic system, and gives life to it. An important function then of the Royal Father is to unite with the Queen, by that symbolizing the sacred marriage of Heaven and Earth. In so doing the totality is reestablished.

It is important to see that these vital processes which formerly occurred in a whole society and found their symbolic expression in the King only—like the Pharaoh—in their historical development could be expressed in many more individuals, until finally in a democratic society they could take place in any individual. The more the social order of kingship degenerated the more they could turn up in the psyche of individuals. Everyone could discover kingship in his own self—which is really the meaning of the process of individuation.

DR. PERRY's study of Biblical Israel and its cognate cultures, Babylonia and Egypt, is also of great interest. Perry, the son of a Bishop, deals with the touchy question of whether the Bible, our own sacred book, can be said to have anything to do with myth? He answers that the Bible is full of the most colorful myths in the sense that

the core of all myth has always been associated with religious practice. Yahweh, in the time of the ancient Hebrews, was a storm god not unlike others of the Near East of that day, and his exploits were no less tinged with the heroic and the boisterous. Perry bases this interpretation mostly on research done by the Scandinavian school of biblical criticism. It is undoubtedly illuminating to see to what a large extent the image of Yahweh as the Royal Father corresponds to the archetypal image, and in particular to certain Canaanite and Babylonian parallels, in idea as well as in ritual, but I believe Perry misses the essential point about the biblical image of God. He does not mention that concrete representation of God was tabooed, that Yahweh had no wife and no ancestors. This shows the limits of regarding the study of myth and ritual from the viewpoint of universal or archetypal patterns only. For the process of individuation the uniqueness of the image of God, and His extreme "otherness" is the essential.

Assessment Revisited

Edwin I. Megargee (Ed.)

Research in Clinical Assessment.

New York: Harper & Row, 1966.

Pp. xv + 702. \$14.75.

Reviewed by E. LOWELL KELLY

The editor, Edwin I. Megargee, is now Associate Professor of Psychology at Florida State University. Until recently he was at the University of Texas. His PhD is from the University of California, Berkeley, and he has been research assistant at The Institute of Human Development and intern psychologist at the Alameda County Guidance Clinic. In addition to assessment, he is interested in hostility and aggression, crime and delinquency.

The reviewer, E. Lowell Kelly, is Professor of Psychology and Director of the Bureau of Psychological Services at the University of Michigan. He is Past President of APA. He received his PhD from Stanford in 1951 and has taught at the University of Hawaii, the University of Connecticut, and Purdue. He developed the first Biographical Inventory for Pilot Selection, H-11, prepared the first chapter on assessment to appear in the Annual Review of Psychology (1954), and served as Director of Selection for the Peace Corps, 1961-62.

IN assembling this volume of readings, the editor's ambitious goal was to produce a book which would serve both as a text for a graduate course in assessment and as a device for improving communication between psychologists who do research on assessment and the practicing clinician who finds little time to keep up with his journal.

This book consists primarily of 58 unabridged reprints of journal articles on assessment, most of which are short (less than 10 pages) and which appeared within the last ten years. A total of 64 authors are represented, eight of whom are authors or co-authors of two or more articles. Although the original articles appeared in 21 different journals, approximately half of them are from three APA journals; *Journal of Consulting Psychology* (13), *Journal of Abnormal and Social Psychology* (8), and *Psychological Bulletin* (7).

Although the editor acknowledges that the merit of this volume is heavily dependent on the authors of the original articles, his own contributions were considerable: decisions as to the topics and techniques to be covered and the relative space devoted to each, the selection of appropriate articles to achieve these ends, and the preparation of a brief but useful introduction to each of the thirteen chapters. These chapters are grouped into three parts. Part I, (4 chapters—11 articles) is concerned with general issues common to all assessment research, e.g.: the criterion, base rates, reliability, and validity, etc. Part II consists of seven chapters; two of them (9 articles) deal with special problems associated with the construction.

scoring, and interpretation of structured tests, e.g., simulation, response sets, and styles. Chapter 7 includes 4 articles on the MMPI, 2 on the CPI, one on the 16 PF, and one on the Myers-Briggs Type Inventory. Chapter 8 (3 articles) concerns special problems of projective tests and one chapter each is devoted to: projective drawings, the TAT, and ink blot techniques.

Finally, Part III (2 chapters, 10 articles) deals with the validity of clinical assessment and the lively debate on the relative validity of clinical vs. statistical integration of data.

IN the selection of articles, the editor obviously chose to reflect the wide diversity of techniques currently utilized in clinical assessment and the marked lack of consensus which characterizes the field. Because of this effort, readers, whatever their persuasion, will probably perceive the book as biased in favor of approaches which they do not embrace. Certainly, half of the readings would have been selected by any other editor with the same goals. Most readers will probably wonder why certain of the articles were included and others not.

As a text in assessment, this volume has serious inherent limitations. As a collection of supplementary readings, it will be an extremely useful and convenient addition to the reference shelf, but because of its price, teachers are not likely to require its purchase by students. Perhaps a paperback edition will appear later! Hopefully, it will be read by those clinicians who are less than satisfied with present assessment techniques and who may be stimulated to read the continuing stream of similar articles which appear each month—or even to undertake additional critically needed research.



Fanaticism consists in redoubling your effort when you have forgotten your aim.

—GEORGE SANTAYANA



A Study of the English Reform School

Roger Hood

Borstal Reassessed. London: Heinemann, 1965. Pp. xii + 244. 42s net.

Reviewed by JOHN M. MCKEE

The author, Roger Hood, is at present Assistant Director of Research, Director of Post-Graduate Studies, and Secretary in the Institute of Criminology at the University of Cambridge. He formerly was Lecturer in Social Administration, University of Durham. He has published Sentencing in Magistrates Courts, and Homeless Borstal Boys.

John M. McKee, the reviewer, is Director of Experimental Projects in Education and Rehabilitation, Draper Correctional Center, Elmore, Alabama. His PhD is in clinical psychology from the University of Tennessee. For the past six years he has conducted a research project in programmed learning with an institutionalized offender population. His current work is concerned with the application of principles of behavior modification and "contingency management" in order to increase educational achievement of prisoners and to develop self-control procedures for released offenders.

THIS scholarly treatise is concerned with the English Borstal System which was established in 1900 as an experiment in prison treatment for youthful male offenders between the ages of 16 and 21. The Borstal scheme, quite progressive for its day, went through several significant modifications—liberal at times when under the direction of the brilliant penologist, Alexander Paterson, for example, but sternly disciplinary at other periods.

Data are presented to show that the humanitarian and intelligent reforms of Paterson yielded substantial reduction in recidivism. Few of these progressive practices (coming in the 1920's) exist in either England or the U. S. today: replacing staff and inmate uniforms with plain clothes, universities

providing housemasters, intense and systematic community involvement in corrections, strong emphasis on personal example by staff, high degree of *esprit de corps* on part of inmates, inmate self-government, etc.

The Borstal System, through the voluntary Borstal Association, also operated an after-care program for releasees. The author's description and analysis of this program are among the best in my literature dealing with aspects of parole and follow-up community services.

An important point is scored by the author when he deals with the problem of evaluation of institutional training vs aftercare: Research data, he says, do not exist that either differentiate or control for the effect of one or disentangle the interaction of both. He further states that this problem is hardly worthwhile to tackle until we abandon "unsophisticated research methods which fail adequately to take account of real differences in the types of offenders given different treatments." The author acknowledges at this point the potential contribution of Marguerite Warren's work in California on the effect of differential treatment of the public offender.

All told, it is an excellent study, clearly and forcefully written, and is recommended to criminologists, researchers, and practitioners in the field of crime and correction.



The primates, which compose the group to which man belongs, show a considerable range in aggressiveness, from the gibbons, in which both sexes fight so vigorously that they can exist only in small family groups, to the howling monkeys, whose fighting almost never goes beyond vocalization in either sex. As for man, there is no doubt that he stands in the upper part of the scale of primate aggressiveness.

—JOHN PAUL SCOTT





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Spring and Summer 1968 . . .

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Conceptions Sex Engenders

Eleanor E. Maccoby (Ed.) with contributions by Roy G. D'Andrade, Sanford M. Dornbusch, David A. Hamburg, Lawrence Kohlberg, Donald T. Lunde, Eleanor E. Maccoby, Walter Mischel, and Roberta M. Oetzel

The Development of Sex Differences. Stanford, Calif.: Stanford University Press, 1966. Pp. 351. \$8.50.

Reviewed by JAMES BIERI

The editor, Eleanor E. Maccoby, is Professor of Psychology at Stanford University. She is interested in socialization in child development, and has strong interests in social psychology including the effect of mass media and public opinion. She is co-author with Sears and Levin of Patterns of Child Rearing.

James Bieri, the reviewer, is Professor of Psychology and Director of the Clinical Training Program, The University of Texas at Austin. His major interest is in a cognitive approach to personality. He has conducted research on sex differences in perceptual and cognitive behavior, especially as these relate to parental identification. He is senior author of Clinical and Social Judgment (CP, March 1967, 12, 130).

FOR the psychologist interested in sex differences in the behavior he studies, whether in the laboratory or in the applied setting, this volume will provide a double attraction. First, it will serve to bring the reader up to date on a broad spectrum of research efforts in this field. The summaries of research data in the major chapters are anchored at one extreme by a chapter on sex hormones and behavior, and at the other, by a chapter on cross-cultural studies. Between these two poles is the second important yield of this book, the detailed consideration of the development of sex-role identity and its

attendant impact upon cognitive and intellectual behavior.

The contributions to this volume were an outgrowth of an interdisciplinary study group which met over a period of several years at Stanford University. Their interest in the topic of sex differences in behavior reflects the increasing attention being devoted to this basic problem in psychology today. Certainly, no aspect of behavior has been more persistently pursued in psychological (and popular) thought, and at the same time, more refractory to sound conceptualization. The currently accepted practice of analyzing one's data separately by the sex of the subjects is usually done not because of any tight theoretical expectations but rather because such empirical differences are so often found. This resistance of sex differences to theoretical development goes back at least to Freud's insights on the role of sex in the development of personality and we may recall the oft-repeated view that his theory seemed more compatible with the psychology of the male than of the female.

WHAT does the present book provide in the way of knowledge that will contribute to the theoretical conception of sex differences? Foremost, the five major substantive chapters in this book, plus the annotated bibliography and classified summary of research in the concluding sections, bring together in

one place a large number of empirical studies that form a modest corpus of the knowledge that will be necessary for any sound future conceptualization. This emergent quality of our understanding of basic phenomena of sex and behavior is perhaps best illustrated in the chapter by David A. Hamburg and Donald T. Lunde on the role of sex hormones in the development of sex differences in behavior. They point out that new techniques for measuring sex hormones are becoming increasingly available and will undoubtedly stimulate research that will provide more clearcut answers to such problems as the relation between changes in levels of sex hormones and intensity of sexual drive in adolescence, the link between androgens and female sex motivations, and the possible relation of androgen level to sex differences in adolescent aggressive behavior.

The basic importance of biological sex factors is also interestingly brought out in the chapter by Roy G. D'Andrade on sex differences and cultural institutions. It is apparent from a comparison of 224 societies on such behaviors as subsistence activities, division of labor, and manufacture of objects that in most groups the two sexes perform consistently different activities as a function of physical sex differences. These behavioral differences in turn may lead to differences in the social structure of family groups, and possibly relate to cognitive functions including fantasy behavior.

WE come to a more focused view of sex differences in the intellectual-cognitive sphere in the chapter by Eleanor Maccoby. Differences in such areas as verbal and numerical abilities, spatial and analytic skills, as well as certain facets of 'creativity,' are considered in relation to child-rearing practices, personality differences between the sexes, and sex-typing. These data are fairly heterogeneous and are not easily integrated, but do point to the possible importance of such factors as cross-sex typing in intellectual development and the impact of maternal intrusiveness in the differential intellectual development of boys and girls. The data also underscore the more familiar suggestion,

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stemming from such work as that of Witkin, that dependence and passivity may have important effects on intellectual performance. Maccoby advances the position that boys and girls differ on the passive-impulsive dimension and that optimum intellectual performance is a curvilinear function of passivity-impulsivity. That is, girls who are less inhibited and boys who are less impulsive will manifest higher intellectual performance.

Sex provokes the major theoretical confrontation in this volume in the chapter contributed by Lawrence Kohlberg as it contrasts with the one by Walter Mischel. These writers exemplify the current east-west schism in child development between those with a more cognitive orientation (with a bow toward Geneva) and those with a social-learning orientation (with a bow toward Palo Alto). The question that Kohlberg and Mischel pose is: how does the child develop a sex-role identity?

For Mischel, this "acquisition of sex-typed behavior" stems from the specific, observational learning experiences of the child. For example, the male child's attachment to the father leads to reinforcement of particular sex-related behaviors, and from the accretion of these behaviors over time he evolves a sex-role identity. In essence, the repertoire of sex-related behaviors becomes for the boy his identity as a masculine person. Kohlberg reverses this process and argues that what is first developmentally is the child's *conception* of himself as a boy or a girl. The child then proceeds to elaborate this basic conception with a wide variety of behaviors that are evoked during the formative years.

In a scholarly and detailed chapter, Kohlberg cites, for example, evidence on boys from father-absent families to emphasize the point that early identification with the father need not be crucial to the development of a basic sex-role concept. This emphasis upon the perceived conceptual similarity between the child and the parental model is certainly congruent with today's emphasis upon conceptual structures in personality development. It also places sex-role development into a broader social context, emphasizing both the role of extra-familial models and ex-

periences as well as the influence of later experiences in the child's developmental progress. It is perhaps in these developing empirical data that we can see emerging the conceptual outlines of a theory of sex-role identification; there seems a possibility that such a theory will consolidate learning data with psychoanalytic and cognitive viewpoints in a meaningful way that will not do violence to the essential contributions of these three approaches.

Obviously, given the scope of the topic of sex differences in behavior, this book of necessity omits many areas of concern. It should serve, however, to bring the general reader up-to-date in selected fields. For the psychologist interested in developmental problems, it will have particular value.

Motivation without Drives, Motives, or Incentives

Robert C. Bolles

Theories of Motivation. New York: Harper & Row, 1966. Pp. 546. \$10.75.

Reviewed by CHARLES N. COFER

The author, Robert C. Bolles, is Professor of Psychology, University of Washington. He received a PhD from the University of California, Berkeley, in 1956 and has taught at Princeton, The University of Pennsylvania, and Hollins College. He has contributed to the Nebraska Symposium and has written experimental papers on matters of motivation and reinforcement.

The reviewer, Charles N. Cofer, has recently become Chairman of the Department and Professor of Psychology at the University of Maryland. He has recently reviewed for CP (CP,).

PROFESSOR BOLLES has produced a good, useful, and important book on motivation. I snickered (to myself) when I found, in the preface, the implication that, unlike certain other works in this area, his would treat motivation historically. I had done just that, and, as I read the first five chapters my fractional anticipatory snickers changed to the whole one interested in history. Bolles considers motivational concepts in the context provided by rationalistic and mechanistic accounts of man, and it is fair to say, I think, that Bolles's conclusion is that motivational concepts are no longer needed—their task has been accomplished.

Bolles begins his treatment by contrasting rationalistic and mechanistic accounts of behavior, and it seems as though motivation has come to be one of the weapons in the armamentarium of the anti-rationalist (associationism is another such tool). The rationalists, of course, required the instinct concept, and out of instinct emerged the drive concept, the bellwether among motivational notions of the last several decades. The fifth chapter is concerned with the drive concept, and, in a way, the chapter concludes the historical development which Bolles has brought off cogently, informatively, and convincingly. I know of no better systematic treatment of this history.

At Chapter 6, Bolles turns to Hull's theory of motivation. There are perhaps two reasons for emphasizing Hull: one is that in Hull drive received its most comprehensive and systematic treatment in a theory of behavior; the other is that, in general, Hull's theory was the most fully-stated of the psychological theories in terms of its syntactic and semantic implications. (Bolles uses the notions of the syntactic features of theories very effectively.) Hull's theory is stated in Chapter 6, and the following five chapters are devoted to its evaluation. These chapters are literature reviews on the topics of antecedent conditions of drive, energizing effects of drive, associative aspects of drive, generalized drive, and acquired drives. Many aspects of Hull's theorizing are, in these chapters, found wanting when they are compared with the evidence,

and throughout Bolles suggests, usually tentatively, associational interpretations of motivational effects.

THE difficulties with drive theory lead Bolles to look elsewhere for viable alternatives. One is incentive theory (Chapter 12); "incentives can explain anything drives can explain" (p. 367), and more besides. But it is currently unclear whether incentives evoke behavior, motivate it, or provide conditions for its reinforcement. Secondary reinforcement, avoidance, and punishment receive examination in the discussion of this issue. Bolles is impressed enough with the reinforcing (associative) aspects of all these ideas that his final chapter states reinforcement theory, and he makes a suggestive case that perhaps all the phenomena of motivation are really phenomena of reinforcement. If this turns out to be true, we will, some day, ask not what motives prompted a man to behave in some way, but rather what conditions of reinforcement led to his actions. Elsewhere (p. 146), Bolles suggests that when we know what stimuli control behavior, what responses actually occur, and what the reinforcers are "little more is added by invoking the drive construct." I believe he would make the same statement about the motivational features of incentives, leaving reinforcement as the concept to replace motivational ones. Further, as Bolles points out, this is not an idle translation of terms. The implications of reinforcement theory differ from those of drive and incentive theories.

These are provocative and well-substantiated ideas, but Bolles is nowhere doctrinaire. His 70-page bibliography attests to his scholarship.

This book is not an omnibus text on motivation. Although Freud, Murray, and Lewin share a chapter, most of the book is concerned with the experimental literature on animals, typically rats. One finds little here on achievement motives, conflict, emotion, activation theory, and other common topics. But this is as it should be, in view of the task Bolles set for himself: to examine the historical and theoretical aspects of motivation concepts and to evaluate

their status and their usefulness. In addition to saying a lot about motivation, Bolles's book is a genuine contribution to systematic psychology in the sense in which the phrase denotes the analysis of the conceptual base of the discipline.

What's Going on Here?

Tamotsu Shibutani

Improvised News: A Sociological Study of Rumor. Indianapolis and New York: Bobbs-Merrill, 1966. Pp. x + 262. \$2.95.

Reviewed by ALAN C. KERCKHOFF

The author, Tamotsu Shibutani, is Professor of Sociology, Department of Santa Barbara. He is author of *Society and Personality: An Interactionist Approach to Social Psychology and of Ethnic Stratification: A Comparative Approach (with Kian W. Kwan)* but is probably best known to psychologists for his American Journal of Sociology article, "Reference Groups as Perspectives," reprinted in two books of readings.

The reviewer, Alan C. Kerckhoff, is Professor of Sociology, Duke University. He is probably best known for his work on the social psychology of family relations but relevant to this review are his *The June Bug: A Study of Hysterical Contagion (with Kurt Back, in press)* and "Sociometric Patterns in Hysterical Contagion" (with Kurt Back and Norman Miller) in *Sociometry* (1965).

"IN this book rumor [is] regarded as a recurrent form of communication through which men caught together in an ambiguous situation attempt to construct a meaningful interpretation of it by pooling their intellectual resources. It might be regarded as a form of collective problem-solving" (p. 17). This definition estab-

lishes the basis for both a critique of much earlier work on rumor and a detailed discussion of the rumor process. The book reflects the position in sociology called 'symbolic interactionism.' Building on perspectives promoted by G. H. Mead, W. I. Thomas, and more recently Herbert Blumer, Shibutani sees rumor as part of the continuous process of social definition: "Human society is a communicative process in which coordinated activities can go on as long as men support one another's perspectives" (p. 182). Given a change that casts doubt on the shared perspectives, which makes coordinated behavior difficult, there will be a collective search for a new basis of action. Information, clarification, interpretation—"news"—will be sought. If official news is lacking or suspect, "improvised news" will evolve through informal channels.

This approach is sharply contrasted with such studies of rumor as Allport and Postman's. Shibutani is critical of such studies because they deviate so widely from the conditions in which rumors usually develop: They use serial transmission rather than a network of communication with continual feedback; they involve messages that are not relevant to a sense of problem among the participants; they focus on "distortion" of message content rather than the collective search for an acceptable definition of the situation.

SHIBUTANI'S approach leads him to differentiate between two general kinds of rumor situation. If collective excitement due to the crisis situation is mild and the unsatisfied demand for news is moderate, rumor construction occurs through "deliberation." This means that normal cultural standards of evaluation are used to cull the suggested explanations of the situation, and the final form which the rumor takes is plausible according to those standards. If, more rarely, collective excitement is intense and the unsatisfied demand for news is great, rumor construction occurs through "behavioral contagion." The contagion results from shared tension, relaxation of critical standards, and a suggestion consonant with the collective mood.

More than forty pages of the text are devoted to the presentation of some of

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the sixty cases of rumor he cites, thus giving a more vivid feeling for the subject matter. These cases, and the diverse bodies of literature cited, show a wide sweep of scholarly and historical perspective.

I would have preferred to have Chapter 6, "A Sociological Theory of Rumor," come first so that the other materials could have been organized around its central themes. It now serves as a means of pulling together the earlier bits and pieces. I would also have preferred a less invidious comparison of the psychological and sociological perspectives. Though I share the perspective Shibutani presents, I suspect that more psychologists would find it more palatable if he did not identify the view he rejects as the "psychological" view. To do so gives inadequate recognition to such psychological contributions as Festinger's theory of social comparison processes and Roger Brown's sensitive analysis of collective behavior.

But these are minor irritations in a book that makes a significant contribution. It is a fine auxiliary text, and the chapter on theory, at least, should be read by anyone even remotely interested in the evolution of social definitions.

Meaning and Association: The Twain Meet

Howard R. Pollio

The Structural Basis of Word Association Behavior. The Hague: Mouton, 1966. Pp. 95. Dutch Guilders 15.—

Reviewed by CHARLES N. COFER

The author, Howard R. Pollio, is Associate Professor of Psychology, University of Tennessee. His PhD with

Arthur Melton is from the University of Michigan and he has been at Tennessee since 1962. He has a dozen or so papers on verbal behavior and verbal learning. He is currently interested in rule using and rule learning.

One wonders how the reviewer, Charles N. Cofer, has had time to do anything else, like moving from The Pennsylvania State University to the Chairmanship of the Department at the University of Maryland. This is the third review CP has received from him in a month. Of relevance to this review are his two books with Barbara Musgrave, *Verbal Learning and Verbal Behavior* and *Verbal Behavior and Learning: Problems and Processes*.

RELATIONSHIPS among words may be described in many ways. Obvious are those relations which are essentially logical in character—synonymy, antonymy, and the like. It is also obvious that words have associations with other words; to uncover the basis for these associational relations is of great interest to students of verbal organization. Words may also be related because they are similar in their properties of being evaluative, active, potent; these are the kinds of relations identified by the Semantic Differential.

In this monograph, Pollio suggests that associative and Semantic Differential relatedness can be given "... a single structural conceptualization ..." (p. 11). This notion, as represented in his Figure 2 (p. 26), shows a rectangular solid, the dimensions of which are evaluation, potency, and activity, and scores on these dimensions indicate the semantic character of a word. In addition, words may also be represented in this figure as inter-associated; the members of an inter-associated set of words will usually but not always be semantically related. The author reviews the evidence which led him to this formulation but the main burden of the monograph is to provide evidence concerning it.

EACH of the 24 Ss in the study gave continuous word associations to each of 4 word stimuli, 2 of the stimuli and their primary associates having

positive and 2 having negative scores on the Evaluation factor. The continuous associates were recorded and then sets of items for each subject were selected on the basis of inter-response times, so that there were fast, medium, and slow times. In two additional sessions, the same subjects gave associations and semantic differential ratings for these items in the fast, medium, and slow sets as well as for the original stimuli. Pollio describes in detail his matrix methods for assessing the associative connectedness of words and methods for collecting semantic differential ratings, and these measures were used to test predictions made about the sets of items with varying time characteristics. The results are clear: The 'fast sets' are associatively more cohesive than the medium speed sets which, in turn, are more cohesive than the 'slow sets,' and inter-semantic distances are smallest for the fast sets, and greatest for the slow sets.

This is an interesting study and its methods and data are presented in full detail. However, one wonders how widely its results can be generalized. Can words which involve associative contrast be incorporated in the model? It seems unlikely, as Osgood has excluded semantic similarity in such cases. Are the three semantic differential dimensions adequate? Deese has found evidence, from analysis of word associations, that there may be as many as 40 independent dimensions necessary to the description of contrasts. Such questions and their answers imply a limited generality for Pollio's model. Yet the problem of the dimensions of verbal organization is an important and vexing one, and Pollio has provided in this monograph a full account of procedures which seem to have great potential value to its solution.



When you write a paper remember that your reader is the stupidest man in the world!

—CHARLES S. SHERRINGTON



A New and Proven Method for Delinquents?

S. R. Slavson

Reclaiming the Delinquent: New Tools for Group Treatment.
New York: Free Press, 1965. Pp.
xvii + 766. \$9.95.

Reviewed by ALBERT W. SILVER

The author, S. R. Slavson, is a consultant for Brooklyn State Hospital and the New York State Division for Youth. He is founder and former editor-in-chief of the International Journal of Group Psychotherapy and founder and president emeritus of the American Group Psychotherapy Association. He is author of A Textbook of Analytic Group Psychotherapy and in 1964 he received the Wilfred C. Hulse Award for his contributions to group psychotherapy.

The reviewer, Albert W. Silver, received his PhD from Michigan State University. From 1958 to 1962 he was Chief Psychologist, Wayne County Juvenile Court Clinic. Currently he is Associate Professor of Human Growth and Development, Eastern Michigan University, and Group Therapy Supervisor, Wayne County Mental Health Clinic.

IN the author's words "... the aim of this six-year study on which this volume was based was to uncover the less obvious and mostly unconscious inner dynamism of the delinquent boy in our culture [and] ... to find an effective procedure for reclaiming comparatively hardened delinquent boys. ... To achieve this goal we eschewed statistical and socioeconomic interpretations. Rather, we felt that ... the understanding of the psychic dynamic of delinquency might ... lead us to the causative interpersonal and social conditions that give rise to them. ..."

What strategies has the author employed and how effective were they in attempting to achieve this two-fold purpose? Working with a small staff consisting mainly of two therapists, Mr. Slavson established two types of groups

—a younger "activity" and a somewhat older "analytic" group—from 35 residential boys referred for group therapy. "Only the analytic groups are discussed in this volume, however." An unfortunate and most surprising omission is the lack of at least a brief description of the activity group and of any comparison of their adjustment with the analytic groups in the Children's Village or after their release. Nor are data of two earlier "observational" groups presented.

Five hundred and thirty-four pages of the volume consist of case histories, detailed group session protocols followed by supervisory comments and periodic progress reports based entirely on the last of three analytic groups (comprised mainly of seven boys; three left the group or the Village). The author also indicates that "no criteria for selection [of members for the analytic group] were employed. . . ."

Clinicians who acknowledge the relevance of historical data such as detailed case histories will admire the care and detail which has gone into the "gathering of complete anamnesis on each boy and his family," including information from courts, hospitals, psychiatric and psychological tests, terminal test results, etc. The impact of familial and cultural deprivation on personality development for example, may be traced from the background material of one delinquent. The therapist in question, however, functioned primarily as a supportive, nondirective, group-centered, positive identification figure and in order not to breach the boys' confidence did not bring this material into the treatment situation. On theoretical as well as practical grounds this raises questions about the relevance of lengthy presentation of such material.

ONE might also overlook failure to set up institutional non-therapy groups and non-institutional control groups in clinically oriented "action research" and agree with the author in looking to progress reports based on a two-year follow-up of the seven boys in the analytic group for two school years as a reasonable test of effectiveness. It is still difficult to see, however, how results

based on as casually selected and small a sample as this may be confidently generalized to other delinquents.

Even the findings reported are none too encouraging. Only one delinquent who was returned to an adoptive home had a consistently positive outcome. Two boys had mixed outcomes while four had primarily negative outcomes. The author speaks repeatedly of pathogenic home conditions to which the delinquents would have to return and of innumerable attempts to involve the parents in group meetings which had to be abandoned due to poor attendance. Yet steps were not taken to provide suitable interim placements such as a half-way house on the boys' return to the community.

Having turned this searching self-appraisal on his experiment the author concludes, "While the outcomes of the boys' participation in the group by and large confirm the validity of the use of para-analytic group psychotherapy with delinquent adolescent boys, it can be expected that the results would have been more impressive had we used for our demonstration a group selected by tested criteria."

The reader will more likely arrive at a different conclusion: even in the face of skillfully conducted and supervised group therapy in a relatively benign, supportive, protected environment, unselected, delinquency-saturated adolescents will probably revert to pathological or delinquent life styles on return to their pathogenic environments.

Preceded by an occasionally brilliant theoretical discussion of delinquency based on psychoanalytic concepts, the lengthy presentation of protocols, progress reports, and outcomes which comprise the major portion of the book may not have succeeded in demonstrating the validity of this form of treatment for adolescent delinquents. Nevertheless, Slavson portrays graphically the backgrounds, behavior, personalities and interaction patterns of typical adolescent delinquents and offers an ego-oriented psychoanalytic psychotherapeutic approach specifically adapted to this deeply troubled and troublesome population.

A Social Psychologist in the Corridors of Power

Hadley Cantril

The Human Dimension: Experiences in Policy Research. New Brunswick, N. J.: Rutgers University Press, 1967. Pp. ix + 202. \$7.50.

Reviewed by M. BREWSTER SMITH

The author, Hadley Cantril, is Chairman of the Board and Senior Counselor in the Institute of Social Research, as well as Research Associate of the Psychology Department at Princeton University where for a long time he was Professor of Psychology and Chairman of the Department.

The reviewer, Brewster Smith, indefatigable reviewer for CP, is Professor of Psychology and Director of the Institute of Human Development, University of California, Berkeley.

WHAT we now call survey research first attracted public attention with the 1936 presidential election and the predictive successes of the Gallup and *Fortune* polls at the expense of the unfortunate *Literary Digest*, whose mail-ballot prediction of a Landon landslide has become part of the national folklore. Then at the outset of his career, Hadley Cantril was one of the few social scientists to take polling seriously as a research method that seemed useful for the sort of humanly relevant social psychology that he was already committed to. Cantril went to Princeton, he tells us, in good part because of the proximity of the Gallup organization, and he has continued to be conspicuously identified with policy-related polls ever since he founded the Office of Public Opinion Research there in 1940. The present slim (and rather over-priced) volume is a distillation of his experiences in policy research, mostly with polling methods, from the

onset of World War II through the Cold War to the immediate present. It contains, as might be expected, important messages for both psychologists and policy makers, and is very readable.

Yet the ends toward which it was evidently written seem to me to conflict somewhat with one another, to the book's detriment. Cantril's primary aim, surely, is to present a conception of psychologically-informed policy-making in international affairs that takes into account the distinctive "assumptive worlds" within which these policies are perceived and received by their many audiences, and to advocate and illustrate policy-oriented survey research as a practical means of providing the information that is needed in support. As Cantril writes in summary of a specific study, but it is his central theme,

"... People in one country ... cannot effectively communicate with important segments of the people in other countries ... if they think only in terms that are significant to themselves and make no effort to understand the meanings that people in other lands attach to the same terms. Although any sophisticated person is intellectually aware of this fact, such knowledge by no means guarantees or seems even to affect the search for and the use of ways of communicating with other peoples in terms of their own experience" (p. 122).

In keeping with this aim, Cantril draws on his rich fund of experience to illustrate research that affected policy—or ought to have affected it. The writing

is simple and nontechnical, and should make his argument accessible to a wide audience. Because, all in all, American policy has *not* been guided appreciably by the kind of psychologically informed perspective that he advocates, he missed opportunities figure prominently. The book ends with a strongly worded complaint about the neglect of psychological considerations in present American policy-making. In this connection, Cantril writes a prescription for the reorientation of policy with which few liberal social scientists would disagree.

"This way of thinking would first of all discard the defensive, cold-war stance of American foreign policy ever since the end of World War II. ... Second, [it] would involve relating our foreign policy to the revolution of rising expectations now sweeping the whole world. ... Third, it would take fully into account the force, the blessing, and the curse of nationalism, including neutral nationalism. ... Now, if it is not already too late, the time for a bold, imaginative, efficient foreign policy and overseas information program commensurate with United States power and consonant with its long-range purposes" (pp. 152-153).

THE second objective lies in the sphere of personal history. Over a distinguished career as a social psychologist, Cantril has repeatedly been involved in policy research and consultation at the highest levels of government. In reporting these involvements, the book contributes interestingly to the history of behavioral science as an emerging influential force. Unfortunately, the popular and rather superficial treatment that suits Cantril's first aim results in an historical account that is less adequate than one might wish. Memoranda that Cantril and his associates drafted to advise the Roosevelt and Eisenhower administrations are indeed quoted extensively, and some evidence is provided about how the recommendations were received. But too much of the writing is at the level of the following account of a meeting with Eisenhower:

"I sensed during the luncheon that the President liked the type of recommendations I was making chiefly because they confirmed his own instincts, instincts

he was often not able to follow because of pressure put on him by Dulles and others" (p. 139). Cantril takes such pains to establish the point that his recommendations were seriously received that he makes the contrary point more persuasively: in absolute terms, and in comparison with the older social sciences, how very little weight, at best, has been accorded to psychological advice.

The mixture of personal history and advocacy has the result, somewhat disadvantageous to both aims, that Cantril's distinctive personal contribution does not get placed in perspective in relation to the efforts of others, particularly the hard-working and harrassed social scientists within the government in politically exposed outposts like the U. S. Information Agency.

CANTRIL'S own role, as he makes clear, was always that of the private citizen. To protect his independence in relation to the government, he found long-term support for his enterprises from private "angels" and foundations. By the device of small-scale non-profit corporations through which he funnelled this support, he achieved an independence from university bureaucracy that he found equally desirable. The reader is readily convinced that his position outside of government gave Cantril more direct and flexible access to high levels of decision making than he could likely have found from the inside. The examples also suggest, however, that to gain access to policy, he willingly forfeited some of the independence of perspective which academics are likely to value. Sometimes, as in his surprising account of work in Vichy North Africa for military intelligence in World War II, he entered the sphere of covert activities that contemporary standards—in another war—would probably regard as incompatible with an academic position.

It is only slightly to caricature the picture of Cantril's role that emerges to describe it as one of volunteer PR man to the high policy-maker. In this role one glimpses the usual tensions between broader and narrower conceptions of public relations. If, as we have

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THE PSYCHIATRIST

Personalities and Patterns

By Walter Freeman, M.D.

"The popular image of the psychiatrist," writes Dr. Freeman, "continues to be a bearded man of short stature . . . hypnotic eyes and Germanic accent, who sits behind his subject, and listens for exactly 50 minutes to the outpourings of the troubled soul, his face a mask, his feelings coldly analytical and his formulations incomprehensible . . ."

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From the Introduction—

"I cannot hope to present the psychiatrist in all his rôles, since individuals are so different from one another; yet, there are certain likenesses that persist from one generation to the next. Many psychiatrists are made, not born that way. As they develop, they acquire certain characteristics that distinguish them, shall we say, from a group of surgeons or of pediatricians. These differences are magnified as they mature and enter middle age. Study of others' writings, and attendance at meetings of their fellow psychiatrists stamp them with a habit of thought, and understanding, not always charitable, of their colleagues in other specialties, and of their non-medical acquaintances. This habit of thought gives them a sense of inner strength that serves them well in adjusting to their manifold frustrations."

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seen, Cantril can ask for the recasting of policy in the name of the "human dimension," as he does both at the end of the volume and at the beginning where he summarizes studies that would have led to wiser U. S. policy in Cuba and in the Dominican Republic had they been heeded, elsewhere we find him accepting what amounts to a handmaiden role on the outskirts of policy. Thus he can write in the narrower PR tradition (which in spite of Bernays seems by far the more frequent in the real world): "It should be emphasized that testing the plausibility of appeals definitely *does not require policy to be altered or tailored in any way*, nor does it involve any tricky strategy. It is simply an intelligent method of framing an approach by ascertaining the psychological context within which the message will be received" (p. 108, italics mine). Mostly, it seems, Cantril's application of psychology to foreign affairs has involved spelling out the perspectivist implications that the content of people's assumptive worlds has for carrying out existing policy effectively. This is a lot. But one tends to miss examples of a broader, more critical role for psychology, where theory and research are drawn upon to challenge the assumptive world of the policy maker. It is one of the ironies of policy-related research that access to the decision makers comes harder the more sharply their basic assumptions are challenged.

It should be clear, even from my more critical remarks, that this is a fascinating little book. Social psychologists and members of the broader audience concerned with the uses of the social sciences in government should enjoy and profit from spending an evening with it.



We can also conclude that there is no such thing as a simple 'instinct for fighting,' in the sense of an internal driving force which has to be satisfied. There is, however, an internal physiological mechanism which has only to be stimulated to produce fighting.

—JOHN PAUL SCOTT



Citizens as Mental Health Workers

Patricia L. Ewalt (Ed.) With a Foreword by Milton Greenblatt, MD

Mental Health Volunteers: The Expanding Role of the Volunteer in Hospital and Community Mental Health Services. (Proceedings of a Conference sponsored by The Massachusetts Association for Mental Health) Springfield, Ill.: Thomas, 1967. Pp. xxiii + 160. \$7.50.

Reviewed by JAMES G. KELLY

The editor, Patricia L. Ewalt, is Demonstration Officer, Massachusetts Mental Health Center.

The reviewer, James G. Kelly, is Associate Professor of Clinical Psychology, University of Michigan. He received a 1958 PhD from the University of Texas, had post-doctoral training at Massachusetts General Hospital and the Harvard School of Public Health, followed by four years with NIMH. He has taught at Ohio State and now at the University of Michigan where he is primarily concerned with the development of training in the field of community mental health for psychologists.

THIS BOOK is a collection of 21 papers presented at a conference held in October 1965 at Boston State Hospital. The conference, sponsored by the Massachusetts Association for Mental Health, was designed so that the 250 professionals and volunteers attending could discuss their mutual concerns about their newly emerging collaboration in the treatment of the mentally ill. Except for the contributions by Harold M. Visotsky of the Illinois Department of Mental Health and Robert C. Hunt from New York's Department of Mental Hygiene, the papers highlight the diversity of roles for non-professionals in treatment facilities within the Commonwealth of Massachusetts, primarily the greater Boston area.

This conference report is best viewed as a series of informal program announcements for the Boston area. The program statements emphasize such topics as recruitment and selection of volunteers, training of volunteers, as well as hints for the evaluation of the effectiveness of the volunteer. Comments on these issues are organized by reports from four different types of settings: (1) community mental health services; (2) services for the chronically ill mental hospital patients; (3) community programs for ex-patients; (4) the use of high school and college students in mental health work. Most programs or services that are described bear little relationships to any of the other programs. What is implicit throughout the book is how each program evolved its own individualized goals and style of operation. This variety also refers to definitions of who is a volunteer. In one program a volunteer is defined as a group of adults who donate their leisure time to the mental health facility on an ad lib basis and supplement the treatment activities of the professional staff. In a second program, local citizens, primarily housewives, served as additional resources in providing indirect, clerical, or public relations functions on a regularly scheduled basis. In other programs, the volunteers already had some professional training and were serving as interpreters or advocates of the service or functioning in ombudsman roles for clients.

While the recruitment, selection and training of non-professionals did vary from program to program, the collective impression of these papers is that professionals are increasingly defining as common tasks, inservice training of indigenous resources as well as enlarging collaborative activities between agencies regarding the work of these new community resources. An interesting side effect of the expansion of volunteer services is that the professionals seem to have more commitment to the coordination of services. It looks as if the volunteer helps the pros to talk to one another! An illustration of this point was a description of how some of the young adults trained and paid by VISTA were assigned to a select number of

mental health services with the result that the volunteers helped to make operational linkages between a variety of health and welfare services in the catchment area of the State mental hospital.

THE BOOK's major limitation is the absence of any integrative summary of alternative conceptions of the non-professional in mental health work or a presentation of strategies for creating new roles in mental health work beyond the Commonwealth of Massachusetts. Since the conference was primarily for that State, this comment could be equally directed to most planners of regional conferences rather than the editor of this book. The book does include as a final chapter an insightful appraisal by David Kantor of the development of volunteerism in the mental health movement, some suggestions for guarding against the professionalization of the volunteer, and a challenge to the professional not to employ the same standards for the volunteer as for the professional. Kantor's concern is that we may select out those persons who do not act like us or do not share our values, but who may be the change agents for our programs. The directness with which these abbreviated program descriptions are presented makes this book particularly apt for the mental health professional who is now beginning to plan for the introduction of non-professionals in his agency. He'll find this anecdotal inventory of do's and don'ts, provocative and supportive.



All this struggling and striving to make the world better is a great mistake; not because it isn't a good thing to improve the world if you know how to do it, but because striving and struggling is the worst way you could set about doing anything.

—GEORGE BERNARD SHAW



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From the Foreword by Lawrence S. Kubie, M.D.

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Milton H. Erickson, M.D., is generally acknowledged to be the world's leading practitioner of medical hypnosis. His writings on hypnosis are the authoritative word on techniques of inducing trance, experimental work exploring the possibilities and limits of the hypnotic experience, and investigations of the nature of the relationship between hypnotist and subject.

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Out of a study of his work can come a new perspective in the field of therapy. The papers in this volume are arranged in three sections: a section on trance induction, one on experimentation, and one on techniques of therapy. Within each section, the papers are largely arranged in order of year of publication. With this arrangement, the reader can examine the papers selectively or read through a particular section and observe the development of Dr. Erickson's ideas in that area over the years. A complete bibliography of his works is also presented so that the reader who wishes to explore his other writings can do so.

CONTENTS Section I. Techniques of Trance Induction
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The Shaping of Things to Come

Richard E. Farson (Ed.)

Science and Human Affairs. (The Lucile B. Morrison Lectures, Western Behavioral Sciences Institute.) Palo Alto, Calif.: Science and Behavior Books, 1965. Pp. ix + 214. \$4.95.

John R. Platt (Ed.)

New Views of the Nature of Man: The Monday Lectures: Clifford Geertz, Willard F. Libby, Derek J. de Solla Price, James M. Redfield, Roger W. Sperry, and George Wald. Chicago: University of Chicago Press, 1965. Pp. 152. \$5.00.

Reviewed by PETER G. OSSORIO

Richard E. Farson, editor of the first book, is Director of the Western Behavioral Institutes, and one of its founders. He received his PhD in psychology from the University of Chicago in 1955 and has lectured at Roosevelt University, University of Chicago, and at San Diego State College. He continues to be a faculty member of the University of California extension. The editor of the second volume, John R. Platt, obtained a PhD in physics from the University of Michigan in 1941. He has taught at Minnesota and at Northwestern, and was Professor of Physics and of Biophysics at the University of Chicago from 1945-65. He is now Research Biophysicist and Associate Director of the Mental Health Research Institute at the University of Michigan, studying the biophysics and structure of neural networks.

The reviewer, Peter G. Ossorio, is a 1961 PhD from UCLA. His undergraduate work was with Reichenbach and he has had graduate work with Carnap and Yost in the philosophy of science, logic, semantics, probability, and epistemology. His current research involves a) research in personality assessment via computer simulation of a

system of observers, b) automatic linguistic data processing, and c) scientific and clinical use of information. He carries on all this at the University of Nevada where he is a visiting member of the psychology faculty participating in an interdisciplinary program in the philosophy of science.

THE VOLUME, *Science and Human Affairs*, brings under one cover some well-known views among fourteen well-known scientists, mostly psychologists. For example, Maslow speaks of the significance of "peak experiences," Newcomb describes the acquaintance process, Allport discusses the nature of prejudice, and Hayakawa is proud of the child who recognizes that *this* ashtray is not the same as *that* ashtray.

Can science solve human dilemmas? Several contributors elaborate the thesis that human nature is not a constant, the implication being that *therefore* we may hope that scientific knowledge will provide a means to human betterment.

To this reviewer the most cogent statements *vis à vis* science and human affairs come from Koch, Kelman and Taylor. Koch introduces as a key ques-

tion—though he does not develop it in detail—the place of the scientist in science. Both Koch and Taylor direct attention forcibly to the startling effect of a reductive "scientific" model of man on both scientists and non-scientists. Kelman underlines the point by exhibiting the same effect in what is on the surface a Utopia (Huxley's) which is achieved through sophisticated methods of behavior control.

The issue to which the reader will be sensitized without being reassured is, what *could possibly* be an adequate guide for shapers of society and controllers of behavior? The disturbing prospect which is raised is that of behavioral science as a self-fulfilling prophesy. That is, if we use a less-than-human model of man in our "objective" science of man we can discover only his less-than-human aspects, and if we promulgate our "discoveries" as the truth about man, and use those "discoveries" in dealing with actual man, why should we not thereby produce a "Utopia" populated with less-than-human beings (such as we should have shown ourselves to be) who would "confirm" our use of that model if we continued to care about that? Redfield, one of the six contributors to *New Views*, brings us to a sense of crisis by drawing a strong historical parallel between our present circumstances and the self-subversion of the Hellenic social order. It is clear that their solution cannot be ours.

THE second book, *New Views of the Nature of Man*, will probably be of greater interest to psychologists both because the contributors are all non-psychologists, hence less familiar, and because of the somewhat greater scope of discussion. Surprisingly, perhaps, the three "natural science" representatives all attempt to present a picture of man which augurs well for his future potentialities. Their principal message is that determinism, whether codified in physical, biological, or neurological theorizing, is not incompatible with human freedom. Emergence, the uncertainty principle, unpredictability, and self-determination are the familiar bases for this conclusion.

Unfortunately, these views stand (admittedly) as opinions rather than as warranted conclusions. Indeed, the suspicious humanist might well wonder whether they did not, after all, come to bury, not to praise him, for in spite of some properly aggressive gestures, these authors show little tendency to go for the jugular vein. To take two examples:

(1) Wald remarks "In sum, I think that we have freedom of will and that it comes out of our uniqueness as individuals, perhaps *wholly determined, yet to some degree unpredictable* (emphases added). However limited in scope, it is One waits in vain for the obvious next step, i.e., "and so, of course, determinism as an *empirical* proposition is *wholly* fictitious." Whether or not the latter could withstand critical examination, surely that step and that examination are called for. The difference between mere verbal claims and established fact is as relevant to determinism as to SR theory. Again, one may wonder at the failure to articulate the concept of determinism even to the point of distinguishing between mechanism and lawfulness—the difference, for example, between "X will happen, period" and "X will happen *unless* . . . (e.g., unless I do Z)."

(2) Sperry, though he attributes causal efficacy to an "emergent" mind in the functioning of the brain, cautions that "... proper function in the uppermost levels always depends on normal operation at subsidiary levels." Not only is this contrary to the generally accepted evidence that physiological anomalies are *not* always reflected in behavior anomalies, but also one waits in vain for a critical examination of the obvious move to symmetry: "proper function at subsidiary levels always depends on normal operation at the uppermost levels" or a substantive variation, "neurological theories (or physical, etc.) *must* conform to what we know about behavior or they are obviously wrong." The latter sort of move is partly accomplished by anthropologist Geertz, who proposes that man is biologically incomplete and is viable only by virtue of the patterns and controls provided by culture.

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It seems hardly coincidental that although these scientists show little hesitation in moving into the "philosophical" problem of determinism and freedom, they show no inclination to deal substantively with values, ethics, or language as such. Is it simply paradoxical that a group of scientists who collectively deny that science is necessarily dehumanizing and decry visible tendencies in that direction should omit from their discussion most of the most undeniably distinctively human characteristics? Probably not, for the studies of language, ethics, and values as such are sharply distinguished from science. We call them "disciplines." And what most distinguishes them from the various sciences is the absence of causal-process models and causal-process methodology. These latter are what we identify as science, and it is this that brings with it the problem of determinism in connection with real people. The failure of the contributors to develop their arguments decisively may be read as the automatic preservation of the causal-process model at all costs.

One cannot but applaud the efforts of the contributors to these stimulating volumes. However, one might well conclude that the most systematic, competent, and cogent thinking about such problems is being done by philosophers rather than scientists. Regrettably,

Something for Everyone in MR

Norman R. Ellis (Ed.)

International Review of Research in Mental Retardation. Vol. 1. New York: Academic Press, 1966. Pp. xi + 308.

Reviewed by DAVID ZEAMAN

The editor, Norman Ellis, has been a leading experimentalist, theoretician, and editor in the field of mental re-

tardation for many years. He received his PhD from Louisiana State University and has taught at the University of Alabama, LSU, and Peabody College. From 1956-1960 he was Director of the Psychology Department at Louisiana State Colony, Pinesville, and he is now Professor of Psychology at the University of Alabama.

The reviewer, David Zeaman, is Professor of Psychology at the University of Connecticut and with his wife, Betty House, directs a psychological research laboratory of mental retardation at the nearby Mansfield State Training School. His PhD is from Columbia and he taught at Brown University before going to Connecticut. He has a lifetime research career award from NICHD.

A proper review of a book in research in the psychology of retardation (MR) needs to consider the retarded state of that field. The big thing about MR is that, until recently, researchers (fearing perhaps that the condition might be contagious) seldom chose MR as a specialty. In the last decade, a massive infusion of federal and private money for MR research has helped to overcome the historic reluctance of behavioral scientists to ply their skills here. One result has been a publication bottleneck; relatively few journals are happy to get MR studies, since editors judge the interested readership to be small.

To open this bottleneck, Norman Ellis has added to his responsibilities as MR researcher and theorist those of an editor. In 1963 he edited a *Handbook of Mental Deficiency*; now he has begun the present job of editing a series of books broadly conceived as providing "a ready source of current information on research and theory development in the field."

No attempt has been made to coordinate or integrate the 8 chapters of the contributors to this first volume. Instead a diversity of approaches is presented, with each contributor provided an open forum for his views on retardation. To characterize briefly the entire assemblage of chapters, the best that can be done is to liken it to an advanced general psychology text with the word "subject" deleted and replaced

by the word "retardate." As might be expected of psychologists in a new field, the over-all emphasis is heavily methodological. Mostly we are told how to do MR research, and how to build theory, rather than what has been discovered and what theories are true.

Bijou begins the book with a position paper setting forth his Skinnerian view of retardation. Researchers are urged to avoid explanations using theoretical constructs, especially those featuring genetically determined unobservable states or traits (such as "intelligence"). The adjective "mental" in MR is decried. In the traditional nature-nurture controversy, Bijou holds to a radical nurture view, regarding retardation as an observable limitation in performance attributable to deficiencies in training histories. Nature is given short shrift. The bulk of the chapter illustrates how retarded development might likely be produced by inadequate reinforcing and discriminative histories, misuse of punishment, and inadvertent shaping of bad behavior. Although the cited evidence for this radical environmentalist position is scant, the happy impression of MR reversibility is left to encourage that small army of indefatigable Skinnerian empiricists to provide the missing evidence. Bijou's chapter might even, through outrage, challenge some behavioral geneticists to show otherwise.

Leonard Ross also has some methodological comment, more pleasing to this reviewer's ears. He recommends the experimental study of classical conditioning and simple discrimination learning in retardation, and a liberalized S-R theoretical approach (in the Spence, N. E. Miller tradition). Samplings of early results are included, some with welcome, normal-retardate comparisons. Ross speaks for and to a large class of learning-theory experimentalists, and effectively demonstrates the applicability of his methods to MR. He says: come on in, the water's fine.

The psychometric approach to MR is ably covered in two chapters, one by Harvey Dingman and C. E. Meyers telling us how factor analysis may be used to describe the structure of re-

tarded intellect, and another chapter by Ralph Reitan on the use of the Halstead test battery to assess the psychological effects of brain lesions. Both chapters are general methodological essays, each including a smidgin of retardate data to whet the appetites of other measurement psychologists. Welcome Division 5 to MR!

EDWARD ZIGLER reviews for us his program of research on retardate personality. He uses projective-like testing situations and a fancy theory to infer motivational states in the retardate. Zigler brings excitement to MR by staging a controversy contrasting his motivational theory of retardation with other theories which postulate some single, immutable, inherent deficit in retardation. The reviewer was amused to find himself misclassified in the latter camp. This chapter will attract to MR those of us who sport a taste for hot and high-level theoretical issues.

Two nicely written, scholarly papers have been contributed by John Belmont and by Carl Haywood and Jack Tapp. Belmont evaluates the experimental literature on long-term memory in retardation (applying Underwoodian principles), and finds it seriously wanting. For anyone planning research on retardate memory, this chapter alone would justify the cost of the book. Haywood and Tapp review the literature relating early environmental enrichment and deprivation to development of adaptive behavior. Mostly animal experiments are included, along with a brief synopsis of the human data. Not unexpectedly, a gulf separates the two.

For the service-oriented, the book ends with a useful chapter by Spradlin and Girardeau focusing on the solution of practical problems of moderate and severe retardates, through the use of operant techniques.

The book is worthwhile. It provides a needed forum; it proselytizes in a hungry field; and it has something for nearly everyone interested in MR.



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COMPARATIVE PSYCHOPATHOLOGY Animal and Human Volume XXII

*(Proceedings of the 55th Annual Meeting of the American
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*(Proceedings of the 56th Annual Meeting of the American
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Edited by JOSEPH ZUBIN, Ph.D.
and GEORGE JERVIS, M.D.

The field of mental development has undergone a revolution in recent years. In the first decade of this century, work in this area dealt largely with intellectual development. The static model of intelligence promulgated by the early workers in this field has been replaced by a dynamic approach involving the interaction of social-cultural, hereditary, developmental, internal-environmental, and brain function models.

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The Object of Murder

D. J. West

Murder Followed by Suicide: An Inquiry Carried out for The Institute of Criminology, Cambridge. Cambridge, Mass.: Harvard University Press, 1966. Pp. vii + 181. \$6.25.

Reviewed by NORMAN L. FARBEROW

The author, D. J. West, is Assistant Director of Research, Cambridge Institute of Criminology and Honorary Consultant, Cambridge Psychiatric Service. He is author of *Psychical Research Today*, *Eleven Lourdes Miracles*, and *The Habitual Prisoner: Homosexuality*.

Norman L. Farberow, the reviewer, is Co-Director, Suicide Prevention Center; Principal Investigator, VA Central Research Unit, Los Angeles; and Clinical Professor of Psychiatry (Psychology), University of Southern California. He specializes in the study of suicide.

THE Sixth Commandment, "Thou shalt not kill," is a dictum deeply entwined in the web of the social fabric of our times. To enforce this self-preservative influence, society has evolved powerful regulations about the taking of life, whether it be another's or one's own. In the latter case, enforcement has been through the formulation of strict taboos; in the former, it has been by exacting severe, and sometimes lethal, retribution. In both cases, society has tended to reject both the act and the actors, and to penalize the offenders either by isolation in prison, or by branding the survivors with shame and uneasy guilt.

As a result of the taboos, little psychological study was carried out on either homicide or suicide, and only recently have they become legitimate as areas for investigation. The author of this book has succeeded in collecting a group of cases which combines both events into one, and in extracting from

the data available in each some meaningful conclusions. One has to be a dedicated and patient researcher, as well as ingenious, both to locate and to wait for such cases. Perhaps this is not so pertinent in England where one in every three cases of murder is followed by the suicide of the murderer. It certainly would be more difficult in the United States where the frequency is approximately one out of every 25.

THE BOOK reports an elegant piece of research, methodologically sound and experimentally well designed. Two samples make up the experimental group of murder-suicides, the main sample consisting of every murder suspect who killed himself ($N = 78$) in three home counties of England, and a supplementary sample ($N = 70$) of every known case from the Metro Police District. Basic information, such as age, sex, relationship between offender and victim, time, place, method, etc. was available in all cases. For the main sample, he was also able to gather considerable additional information, supplementing police records with data from coroners, family doctors, probation officers, social workers, and mental hospital records. The information was both extensive and in depth, bringing to mind the "psychological autopsy" technique employed in the investigation of equivocal suicidal deaths in Los Angeles. One essential difference in the methods lies in the fact that the psychological autopsy investigations always seek out the

survivors and significant others for essential interpersonal and communication information. The author, "for ethical reasons," deliberately excluded relatives or others "personally involved in the tragedies." Experience in Los Angeles has shown that significant clinical and scientific purposes can be accomplished without violating the ethics of the situation.

A control group ($N = 148$) was obtained by collecting unselected cases of murders from the same areas, on record as occurring closest in time to the dates of the experimental cases. It is apparent the author started from the premise that he was investigating a group of murderers (who also committed suicide), which is the reason for a control group of murderers. His results, however, showed that the persons who committed suicide after murder generally bore a striking resemblance to ordinary cases of suicide. The motivations were primarily the same: that is, there was despair and hopelessness in the aged sick, impulsive aggression of the young in frustrating and ambivalent love affairs, or fear of financial or sexual misbehavior. Perhaps the key conclusion was that many of the murder-suicides were really suicides which had been extended to include an innocent victim, rather than a murder followed by a suicide as an afterthought of fear and remorse. While occasional comparison of his findings with general suicide data are made, a detailed comparison with a new control group made up of suicides *not* preceded by a murder is an obvious next step.

The author's analysis of the data is workmanlike and thorough, and he is able to answer most of the questions which would occur to an interested reader. A clear picture of the murder-suicide person emerges: he is, compared with the murderer, less socially deviant, in a close relationship with his victim, a member of all classes of society, and has few previous convictions for offenses. Almost half the victims are under 16 years of age with, generally, the mothers killing their children, and the men killing their wives or girl friends. A high proportion are women (40 per cent in the murder-suicide group versus 12 per cent in the murderer

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group). The victims of the murderers in contrast are nearly all strangers or casual acquaintances, with 22 per cent killed in the furtherance of their crimes, such as robbery, burglary, and sexual assault.

Almost half the population in each group was considered psychiatrically ill, primarily with depression, both neurotic and endogenous. Some readers might question the criteria for psychiatric classifications, which tend to continue distinctions between American and continental approaches to nosology. However, the author is aware of the differences in classification systems and notes that many of the cases called psychotic depression might have been called schizophrenic in the United States. Like a good investigator, the author presents the symptoms and personality characteristics of his subjects in sufficient detail, so that the reader can make his own diagnoses if he wishes.

Of most interest theoretically is the discussion about an old problem, aggression and the interchangeability of its object. West concludes that his data support the Freudian theory of the interchangeability of self-directed and other-directed aggression. Support for his conclusion is drawn from the social records and personal case histories of his subjects, as well as from epidemiological sources such as a high suicide-murder ratio. The last assumes that aggression, innate and universal, in some cultures will find an outlet in self-destruction which results in a low proportion of homicide. However, clinical evidence impresses with the complexity of dynamics involved in the act of inflicting harm on someone else, self, or both. Many cases come to mind in which the object of the aggression, self or other, was dictated by pure chance, while in other cases the object could be predicted with great certainty. The difference seemed to lie in how well incorporated were personal and cultural controls. The interchangeability of object is perhaps seen more often in the tenuous ego with poor controls. The brittle personality with overly developed superego could react only against himself, while the psychopath with few

controls reacts against others. Mix these factors with the cultural influence of emphasis, acceptance, or repression of aggressive activity, and the interchangeability of the object of the aggression seems more determined by basic personality configurations within a specific cultural framework than by the assumption of a cross-cultural universality of aggression.

The book is not easy reading, probably because it confines itself largely to the data which it mines exhaustively. The results are worthwhile, however, and achieve the goal of extending the boundaries of the information accumulated about self- and other-destruction, thus adding one more wedge in the drive to open to the examination of the social scientist the taboo phenomena of death.

A New Eye on Industrial Disputes

Ross Stagner and Hjalmar Rosen

Psychology of Union-Management Relations. (Behavioral Science in Industry Series) Belmont, Calif.: Wadsworth, 1965. Pp. vii + 147.

Reviewed by THEODORE V. PURCELL

The first author, Ross Stagner, recent President of APA's Industrial Psychology Division, has taught at the University of Akron, at Dartmouth College, the University of London, and at Wayne State University where he is now Professor of Psychology and Department Chairman. He is the author of *The Psychology of Personality* and *The Psychology of Industrial Conflict*. The second author, Hjalmar Rosen, PhD University of Minnesota 1951, is Professor of Psychology at Wayne State University. From 1948 to 1951 he was Education and Research Director, Amalgamated Clothing Workers of America. He has

taught at the University of Illinois and is author of *The Union Member Speaks*.

The reviewer, Theodore V. Purcell, S.J., received his PhD in social and industrial psychology at Harvard. From 1962-65 he was Director, Institute of Social Order, St. Louis. In 1965 he became Director of the Cambridge Center for Social Studies, an independent interdisciplinary research center. He has taught at Loyola University of Chicago, Dartmouth College, and Harvard. He is now a Visiting Lecturer for Organizational Psychology at the Episcopal Theological School at Harvard. He is also currently engaged in research on psychological aspects of corporate social responsibility, specifically in the area of equal employment opportunity in the electrical industry.

As a refreshing break from the past, psychologists are now eagerly applying their craft to understanding union-management relations, an area traditionally reserved for sociologists, economists, and lawyers. This is fortunate because people at work continually throw psychological monkey wrenches into rational, smooth-flowing socio-economic and legal machinery. As part of a behavioral science in industry series edited by Victor H. Vroom, the *Psychology of Union-Management Relations* gathers recent studies and, at a rather basic level, presents their essentials in a short readable book.

THIS BOOK utilizes the two fundamental concepts of perception and motivation, leading into a third area of frustration-aggression to throw light on the behavior of leaders and rank-and-file members of unions and management. Eight principles of perception are used to explain how rigidities in perception, biased sampling, stereotyping, emotional influences, social role, and socio-economic status affect disputes that so often result from a "dialogue des sourds," with neither side listening to what the other has to say.

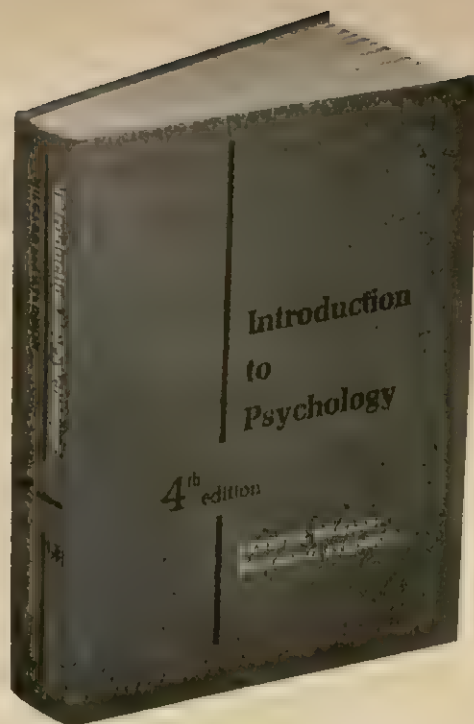
Opposed to older, behavioristic schools, the authors propose a motivation theory emphasizing ego motives of

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■ **Test Item File**, prepared under the authors' direction by Earl L. Jandron. Twenty multiple-choice questions (with answers) for each chapter of the textbook, printed on 3 × 5 file cards, are indexed according to the chapter, topic, and page where the subject is discussed.



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personal worth, desire for recognition, approval, and significance. They note that a worker frustrated at work, instead of quitting, may lower his level of aspiration, limit his output, or secure, through group action, higher pay and fringe benefits. They see that a dominant need of union leadership is to preserve the organization. This is also true, however, for management, government departments, churches, and many other organizations. Industrial frustration will result in aggression or apathy when the worker perceives his work goals as unattainable, and company rules as ridiculous or unexplained. The unionization of workers is accounted for, in large part, by feelings of frustration on the job.

This book is primarily concerned with disputes involving contract negotiations and grievance procedure. Useful application is made of the Subjective Expected Utility concept (SEU), by which union or management strategists will evaluate their course of action both by its probable eventuality and its utility to their own group. Another helpful concept is the "psychological contract" between workers, union, and company as a set of mutual expectations that may be unenforceable, but is still a dynamic force in negotiations.

The authors' discussion of forestalling and settling industrial disputes comes to the heart of their argument. They identify three basic principles: first, a higher loyalty on the part of the parties to some more inclusive group; second, the parties' superordinate goals, such as mutual survival; third, a common frame of reference, so that the disputed facts are at least perceived in a similar way.

With these principles, the collective bargaining process is accurately seen as a learning process for the members of both teams, leading to changes in perception and better knowledge of the opponent's limits. The psychological reasons for arbitration are noteworthy; namely, that arbitrators are thought to have a more disinterested perception of the facts. The same thing is said for industrial mediation whose purpose is to break the communications barrier between the parties.

Since industrial disputes do not happen without warning, the psychologist contributes most by helping to forestall disputes before they become critical. Toward this, Stagner and Rosen see improvement in communications between the parties as a major step. Permanent human relations commissions of executives and union leaders, as in steel, autos, and meat packing, are proposed as a desirable structural device.

In analyzing power motives in industrial conflict, the authors say well that, unlike the gross national product, the quantum of power cannot be increased; it can only be redistributed. Therefore, industrial disputes will continue to center around power issues, with economic benefits merely as symbolic counters in the game.

THE AUTHORS' predilection for the concept of homeostasis leads them to see the industrial organization primarily as a device for restoring equilibrium. This reviewer finds the homeostatic concept of company and union inadequate to account for the fact that such organizations constantly want to grow rather than to seek equilibrium.

The paucity of empirical data applying constructs of perception, motivation, and frustration to actual cases of collective bargaining, arbitration, and mediation doubtless explains the few citations made by the authors to psychological analysis of dispute dynamics. A notable exception is the data of clinical psychologist George Muench, who was able to restore communications in a manufacturing company plagued with chronic labor trouble. The authors give a good reason for the dearth of studies: "Few companies ask psychologists to help with mutual-understanding techniques before industrial disputes become acute. Yet this sort of help is what is needed" (p. 120).

Industrial relations students and union-management participants who take to heart the principles of this book will gain needed insights into their own and their opponents' behavior. Insights will not eliminate, but will mitigate disputes. Participants may not want psychologists around because insights re-

quire a change in previously ten positions. But books like this, developing the psychology of industrial relations, will show the value of occasionally changing set positions and will give new tools for solving industrial problems and for understanding human behavior.

Festschrift

Margaret Ruth Smith (Ed.)

Guidance Personnel Work: Future Tense. New York: Teachers College Press, Columbia University, 1966. Pp. viii + 176. \$4.00.

Reviewed by GEORGE A. PIERSON

The authors and editor are identified by the reviewer, George A. Pierson, who is Professor of Education, Queens College of the City University of New York.

IN JUNE, 1966, Professor Esther McDonald Lloyd-Jones retired at Teachers College, Columbia University. During her long and distinguished career, Professor Lloyd-Jones sponsored the doctoral studies of more than 200 successful candidates. Her former students now occupy important positions in educational institutions throughout the United States and in many foreign countries. The influence of Professor Lloyd-Jones upon the teaching and practice of guidance and student personnel work has been profound.

As the retirement of Professor Lloyd-Jones became imminent, an ad hoc committee was formed to plan an appropriate commemorative volume. The committee selected *Guidance-Personnel Work: Future Tense* as a title and invited former students to prepare manuscripts for consideration. More than 30 were received and 15 were finally selected for publication. It is the hope of the editor, Margaret Ruth Smith, and

the committee that "these writings will stimulate thought and action on the part of educators in elementary, secondary, college, and adult education who have concern for both personal and intellectual growth of persons."

The authors of these 15 papers make full use of the ideas basic to the teachings of their mentor: the idea that humanity will triumph ultimately and that self-fulfillment, maximum personal development, and individual responsibility are realistic goals; the idea that the practice of guidance and student personnel work is a *professional* service; and the idea that educational programs for the preparation of professional guidance and student personnel workers must be interdisciplinary.

The writers speculate as to the nature of guidance and student personnel work in the decade ahead. They see the counselor as the primary guidance-personnel functionary, but they reason that the future counselor will do more than counsel students individually. He will work with students in small groups. He will consult with parents, teachers, administrators, and community leaders. He will become an expert in human relations and an organizer of school and community resources.

There are those who will be disappointed because the volume does not contain some description and evaluation of modern guidance-personnel techniques. This, of course, was not the purpose of the planning committee or the authors. By design the book is general and speculative.

I found two chapters to be especially useful: "Guidance and Counseling of Minority Youth" by Jeanne T. Noble and "Counseling Adults in Continuing Education" by Esther Westervelt. Most guidance and student personnel workers will discover the information contained in these papers to be new and valuable.



The unconscious ideas of the patient are more often than not the conscious theories of the therapist.

—ERWIN W. STRAUS



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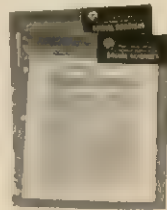
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1963, 468 pages, \$7.50

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Edited by Robert E. Grinder, The University of Wisconsin

"The book clearly provides a useful source of the best studies published in a number of areas of adolescence over the last decade, and is to be recommended to instructors looking for either a main text or an adjunct book."—*Contemporary Psychology*

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1963, 524 pages, paper, \$4.75

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Contemporary Psychology, 1968, Vol. 13, No. 3

The Gentle and Injurious Gods

M. Esther Harding. Foreword by Franz Riklin

The Parental Image: Its Injury and Reconstruction. New York: Putnam, 1965. Pp. xviii + 238. \$6.50.

Reviewed by JAMES KIRSCH

The author, M. Esther Harding, is an analytical psychologist in private practice in New York, now primarily a writer. She has been one of the leaders of the Jungian school in the US since 1922, and has lectured widely in this country, England, Canada, and Switzerland. She is author of *The Way of All Women*, *Women's Mysteries*, *Psychic Energy*, *Journey into Self* and *The "I" and the "Not-I."*

The reviewer is the same James Kirsch who wrote Shakespeare's *Royal Self* and reviewed Perry's book on page 123 of this issue.

DR. ESTHER HARDING, a close friend of C. G. Jung's for more than forty years, has tried to acquaint the American public with his fundamentally new attitude to life, to the unconscious, and to the science of psychology. In her books her lucid style and penetrating view have succeeded in describing simple but unaccustomed ideas like the archetypes in a manner which any educated layman can comprehend. She has become Jung's most widely known interpreter in this country.

In *The Parental Image*, the first book in a series published by the C. G. Jung Foundation, Harding deals with archetypal complexes of the Father and the Mother in the "normal," and in the pathological life of the psyche. It is characteristic for the Jungian viewpoint to consider neurosis not only as a problem of consciousness but essentially as one of the unconscious, and of the relationship of consciousness to the unconscious. According to Jung's now

widely-accepted hypothesis, the unconscious consists of a universal layer (which he called the collective unconscious) as well as a personal layer.

In contrast to personalistically-oriented psychological theory, this book is essentially concerned with processes going on in the collective unconscious. Dr. Harding's description of psychological conditions in individuals, as well as in antique cultures, follows mostly patterns of the collective unconscious. It can be known best by its precipitates in myths and fairy tales. Because the Babylonian myth of *Enuma Elish* deals in beautiful symbolism, with fundamental situations depicting the origin and development of consciousness, Dr. Harding uses it as the basis for most of her psychological deliberations. She quotes all of the myth's critical turning points and accompanies them in a lively fashion with theoretical explanations, as well as giving examples from everyday life. Her commentary reveals the tried and refined wisdom of a mature woman, whose long years of true living have allowed her to condense her knowledge into simple and luminous symbols.

SHE defines the archetypes as "in-born patterns of behavior that we call instincts, and, in addition, patterns of the functioning of the psyche itself. They are of course invisible and inaccessible to consciousness, but their images are readily accessible to observation" (in our dreams and fantasies). Like platonic ideas, they remain forever beyond consciousness. They are pat-

terns of imagination. Their various aspects can be represented in images. Therefore symbols always contain something unknown. This is why we can state flatly that the archetypes of the unconscious cannot possibly be injured.

The archetypes express themselves in man's inner feelings, no less than in his outer life experience, in pictures or images of injury, loss or decay. As an example, Harding points to the story of Paradise, which was injured by the theft of the fruit of the Tree of Knowledge. Psychologically, the Garden of Eden corresponds to the Mother World. It is the protected place, a container of an immature and helpless child. By necessity, the child has to grow out of this primal condition and, during its development, is exposed to a great many possible injuries.

The healing value of myth is that in the universal language of images it tells the story of how the hero can overcome all obstacles and reach adult maturity. Dr. Harding parallels several motifs in such myths with typical situations of modern people and proves her point that healing results once the collective unconscious is contacted. In the ending of the Babylonian creation story, Marduk, the hero, triumphed over the parent gods but he could maintain his rule of consciousness only by administering his new-won territories with the help of the lesser, un-named gods. The "named gods" seem to have contained a spark of consciousness, while the "un-named gods" would represent completely unconscious energies—instincts, emotions and other compulsive factors. In her view, the gods are the psychic elements, instinctive energies. In the child and in the unconscious adult, they are not yet part of the conscious personality. They express themselves in compulsive emotionality—aggression, anger, love, desire, appetite of all sorts, sloth, cupidity, and so on.

There are many gems of profound psychological insight in this book—one, for example, a brilliant interpretation of the earliest stories of *Genesis*, which fits very well Dr. Harding's general theme of following up the development of consciousness from its origins to full maturity.

In practical value, all of Dr. Harding's mythological amplifications, like those of the Babylonian Myth and of *Genesis*, allow her to demonstrate the injury to the image of the parental pattern in three clearly distinct ways: "First, the normal rebellion of the child, followed by the hero-fight against the parent archetype in the form of dragon or monster, represented in the Babylonian myth by Marduk's fight against Tiamat. . . . In the second situation, the parents have not been able to fill their roles adequately, and consequently a pathological injury has occurred to the parental image in the child's psyche. (This is the area with which Freudian analysis deals to a large extent.) . . . Thirdly, there is the case of the individual who has a normal home, has been able to leave without serious conflict . . . yet at about the mid-point of life (between 37 and 40) he finds himself in a desert place where life has lost its savor and nothing seems to have its old interest or value for him." He is in a psychic wilderness, isolated from man and alienated from God.

It is this last confrontation to which Dr. Harding devotes the most important part of her book in discussing the healing process of adults. Within the limits of the physician's discretion, she describes the personal psychology of two patients—a man and a woman; the effect their parents had on them; the injuries to their parental image—and its healing, which was achieved by an integration of dreams and visions originating in the collective unconscious. Both examples are not really case histories. Rather, they give a vivid impression of what goes on in a classical Jungian analysis. They show how the contact with the unconscious, the growing understanding of its contents, and the integration of archetypal motifs, brings about a healing and new meaning in life.



*A man's real possession is his memory.
In nothing else is he rich, in nothing else
is he poor.*

—ALEXANDER SMITH



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3rd Ed., 1966. 733 pp., illus. \$8.50

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Native Nativism

Marshall H. Segall, Donald T. Campbell, and Melville J. Herskovits

The Influence of Culture on Visual Perception. Indianapolis, Ind.: Bobbs-Merrill, 1966. Pp. xvii + 268. \$2.95.

Reviewed by RICHARD L. GREGORY

The first two authors are both Professors of Psychology at Syracuse University. Marshall H. Segall received a Northwestern PhD and has taught at Columbia, the University of Iowa, and Syracuse University. Donald T. Campbell received his PhD from the University of California, Berkeley, and has taught at Ohio State, University of Chicago, Yale and Northwestern. The late Melville J. Herskovits, the third author, was, until his death, Professor of Anthropology at Northwestern.

The reviewer, Richard L. Gregory, was until recently Head of the Perception Laboratory at the Department of Psychology, University of Cambridge, but is now Head of the Bionics Research Laboratory and co-Chairman of the Department of Machine Intelligence and Perception, Edinburgh University. He is author of *Eye and Brain*, recently reviewed in CP.

How far perception is affected by individual experience is a controversy which started many centuries before the birth of experimental psychology. It was a concern of the Greek philosophers, especially Plato, and was a major issue in seventeenth and eighteenth century philosophy; Berkeley, Descartes, John Locke, and David Hume regarded it as a matter which could be decided by experiment with the rare cases of people born blind and recovering sight by removal of cataract of the eyes when adult. In the last century Helmholtz also discussed the question, with this kind of evidence in mind, and D. O. Hebb considered it further (in 1949)

in his *Organisation of Behaviour*, which followed the data collected by Von Senden in 1932, recently published in English. Later writers have questioned this evidence, and also whether it is open to any simple interpretation. The first data from a different source—cultural differences in perception—were obtained by Rivers, in 1901 with his studies of perception, especially of the distortion illusions in the New Guinea islanders. He obtained evidence that figures such as the Muller-Lyer arrow illusion are seen as less distorted by the jungle-dwellers than by Western man. Such differences have been confirmed by later writers, including G. W. Allport and T. F. Pettigrew, in their studies of Zulu perception of the Ames rotating trapezoid. There are many more-or-less formal accounts of peculiarities in the perception of non-Western people from missionaries and anthropologists, who frequently report that drawings, maps, and photographs are not understood, and that there is a curious inability to draw pictures in anything like geometrical perspective. Indeed, little or no perspective is found in any art until the early Italian Renaissance. Its absence is striking in Egyptian and other early sophisticated art, even in technically detailed pictures where clear indication of depth would seem to be most useful—if it could be represented and understood by the viewers of that culture.

WHAT Segall, Campbell and Herskovits have done in this book is to

present from a particular theoretical point of view much of the earlier evidence of cultural differences in perception, together with new findings and raw data from carefully described experiments. Their theoretical standpoint is stated clearly from the start—and not as a final bogus revelation, as in so many monographs. This is a great advantage, for the reader can apply his own 'personal equation' in estimating the inevitable bias of the writers. Their basic position is that perception is affected, though not wholly determined, by individual experiences and that 'cues' for seeing depth, movement, etc., are built up from the particular experience of each individual and applied without awareness. When these cues, derived from largely invariant features of the environment, are inappropriate, then perception goes wrong and distortions or other illusions are generated. Early experience of environments different from ours may give rise to different illusions or to an absence of particular illusions.

Western people suffer marked distortion of flat figures presenting perspective depth, especially converging lines (the Ponzo illusion) and drawings of corners (the Muller-Lyer illusion). People living in environments where long parallel lines are rare (roads, railways, walls, etc.) or precise corners (rooms, furniture, boxes) suffer these distortion illusions to only a small degree. They have not used perspective for judging depth in their three-dimensional world, and so it does not mislead them when presented on a flat plane as in a picture. A complete theory along these lines involves further concepts, notably the role of size constancy and its relation to perspective 'cues' of depth, but this should indicate the kind of importance that these anthropological data can have for perceptual theory.

Roughly one might say that if perceptual learning is indeed important, then illusions may be regarded as negative transfer of perceptual learning, occurring when the earlier experience is inappropriate to present reality. The occurrence, or non-occurrence, of illusions in peoples with different early experience is important for establishing the role of perceptual learning, and also

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Here, for the first time in any language, is a composite collection of all of Helmholtz's major contributions to the physiology and development of perception—including a discussion of the relevance of his work to current problems.

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This important new book contains 51 articles representing a wide variety of historical and contemporary approaches to the study of attitude.

The author has taken pains to include "classics"—articles that have already demonstrated their lasting significance to an understanding of the attitude concept. Although approximately half the book is concerned with attitude measurement, the emphasis is on those articles that are primarily concerned with the theory underlying attitude measurement rather than the measurement process *per se*. 1967 409 pages \$10.95

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the origin of the illusions. Current theories of the illusions divide between those supposing the critical shapes disturb built-in shape analyzers, and those which suppose that these particular shapes are misleading depth cues which set size constancy inappropriately to prevailing reality. The first kind of theory says that the brain's "hardware" is upset, while the second says that it is a matter of early (appropriate or inappropriate) "programming" of the brain's "software." This is a way of stating the old distinction between nativism and empiricism—and the distinction is vital in considering all brain function. The evidence presented here favors the view that early experience is important—that appropriate learned "programs" are important for veridical perception and that illusions can result from inappropriate perceptual learning.

THE BOOK is carefully written, the figures are clearly drawn, and unusual trouble has been taken to bring out the difficulties—logical and experimental—of this kind of enquiry. The authors do not gloss over the difficulties of using responses to indicate perceptual phenomena: a tricky matter and hardly mentioned in our textbooks. Commendable care has been taken to minimize communication problems with subjects, living in their differently structured environments and speaking unfamiliar kinds of language.

It is important to discover just how adaptable the perceptual systems are in performing the new tasks imposed upon the nervous system by modern technology. Perhaps the Zulus can tell us something about future astronauts: how far they will be misled by their past; how rapidly they will adapt to strange surroundings. The authors are to be congratulated on producing a timely and interesting book, which is both a contribution to an ancient argument and a warning of future perceptual hazards.



The Eye of the Beholder

Roger Mucchielli

Introduction à la Psychologie Structurale. (Psychologie et Sciences Humaines) Brussels: Dessart, 1966. Pp. 290. F. 14.50.

Reviewed by DONALD M. JOHNSON

The author, Roger Mucchielli, is Professor of Psychology, Faculté des Lettres et Sciences Humaines, Université de Nice. He had a military career and a medical degree before taking up academia. An official educational mission brought him to several universities in the US in 1954. In addition to editorial duties he has published many articles and several books such as Philosophie de la Médecine Psychosomatique and La Personnalité de L'enfant, now in its 7th edition. Le Mythe de la Cité Idéale will soon appear in English.

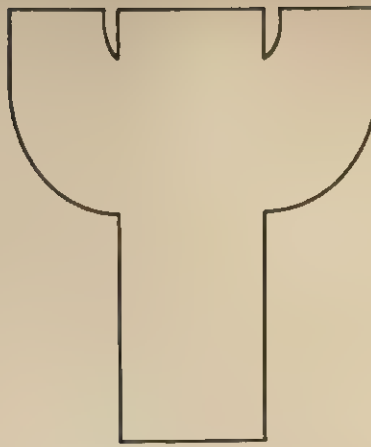
The reviewer, Donald M. Johnson, is Professor of Psychology at Michigan State University. He has published three books and many articles in the psychological journals, mostly about the experimental psychology of thinking. His present research concerns the improvement of productive thinking through training in judgment. A forthcoming report will show how college students' solutions to problems can be improved by training in evaluation of these solutions.

STRUCTURAL PSYCHOLOGY, writes Mucchielli in French, is in the air. In English too the winds of doctrine have surrounded us with theoretical essays on cognitive structures and attitude structures and several books with structure somewhere in the title. Structures go with plans (Miller, Galanter, and Pribram, 1960) and direction (Berlyne, 1965) but also with uncertainty (Garner, 1962). The structures that interest Professor Mucchielli are structures of ex-

perience that give meaning to the data of reality. They are unconscious, just as grammatical forms, though they dictate language behavior, are unconscious. There can be no language of the unconscious, we are told, because grammar is not discourse, but the structures can be inferred through their effects on behavior.

The contents of a structure vary from time to time and from place to place and may appear objectively different under these different conditions; the stability of behavior comes not from the observable contents but from the structure that contains them. Inversely, actions that are objectively similar may have different meanings to different people and in different cultures because they are shaped by different structures. It is not surprising that the author acknowledges an intellectual debt to Levi-Strauss, the structural anthropologist.

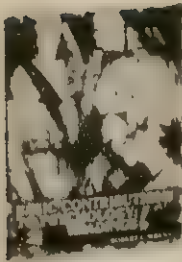
Mucchielli also acknowledges a debt to the phenomenologist, Merleau-Ponty, and makes much of his statement that meaning occurs when we impose a coherent deformation on the data of the world. Just as the stickleback lives his life in a world structured from signals of biological significance to him, the human animal lives his life in a framework of concepts that he has constructed in the course of his debate with his environment. He codes all his experience into a system of categories, reflecting certain ways, partly cultural and partly personal, of dividing up reality. Thus we are all prisoners of



psychology

A CONCISE INTRODUCTION TO THE FUNDAMENTALS OF BEHAVIOR

by Charles W. Telford and James M. Sawrey
San Jose State College



Designed to focus on the principles of psychology, this text covers the conventional topics of introductory and general psychology courses in a concise and interesting manner. The concise nature of the text makes it ideal for use in a one quarter course and also permits it to serve as a core book for use with a variety of supplementary paperbacks, books of readings, reprints, and other related materials. May 1968. About 400 pp. 7 x 10. Illustrated. Clothbound.



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meaning, our author tells us, and psychologists who reach out for objectivity grasp only their own meanings—while the operative meanings of the subject, that determine his actions and reactions, escape.

Along these lines Mucchielli arrays certain observations and results of research on ethology, perception, cybernetics, comparative linguistics, and thinking, not as a systematic introduction to the empirical findings, but as evidence of the importance of structures of significance. Then he applies his theory to affective structures—using Ribot's old term, *la logique des sentiments*—, to personality, and to neurotic thinking. The affective structures of the human being, though unconscious, are expressed in words, fantasies, metaphors, dreams, and symptoms. Clearly these are not structures of behavior; they are closer to what others call cognitive structures or primitive beliefs.

THOSE who go along with the author in his criticisms of simple associationisms, both that of the behaviorists and that of the psychoanalysts, and admit the necessity for structured theoretical constructs will begin to look, sooner or later, for a discussion of methods. How does the author know about these unconscious structures that are expressed in so many actions, attitudes, and symptoms? On this point Mucchielli is more casual than convincing. He treats structures as akin to concepts and stresses their function in the coding of information but he does not apply the objective procedures of concept research to the study of structures. He lists a variety of techniques, including projective tests, that are intended to reveal structures of perception and structures of expression, but the links between the data and the structures are not made clear. The extracts of cases and the discussions of these appear to come from the traditional question-and-answer interview.

The author's use of the interview material—mostly from his own private practice—departs, however, from that of the Freudian depth psychologists, whom he characterizes as spelunkers of the mind. Mucchielli criticizes Freudian

analysts for attempting to analyze, to divide psychic activity into elements and to treat them as incoherent impulses. The structures that behavior expresses are coherent; the psychologist's efforts should be directed toward finding these affectively significant structures in large numbers of analogous situations. Listening to someone talk about his past, his existence, his feelings, and his perception of the people around him will give us the impression of a coherent universe as soon as we understand how he has laid out the dimensions of meaning that are significant to him. Mucchielli quotes from Freud to show how this method was used by the master himself, even though his elementaristic associationism prevented him from describing it.

IN his preface the author states that he is writing for "psychologists and for those who seek information in this domain." For well-read psychologists much of the argument will be familiar. Cultural relativism is no longer a new discovery. Associationism and psychoanalysis are well-punched targets of criticism. The most original contribution is the placement of a structural account of personality in a general structural psychology. In this respect the grand design resembles that of the personality-perception psychologists who have tried to link personality to general psychology by way of the tachistoscope and the tilted chair, but Mucchielli depends more on structures of affective and social significance than on perceptual structures. This is a promising theoretical project but, in the absence of empirical data, it will remain a promising theoretical project. Another line of development that the author promises is a method of psychotherapy to be deduced from structural analysis.

It is true that structural psychology is in the air and that many psychologists are ready for structural principles that are explicitly supported by factual data. But there are no facts here, no tables, no graphs, no chi-squares. There is nothing to counter the impression one gets from *Contemporary Psychology* that the facts of personality are outnumbered and outranked by the theories

of personality. It is not too much to hope, however, that some readers of this introduction will be encouraged to devise adequate methods to give these abstract structures a solid foundation.

For the other audience, "those who seek information in this domain," the book has certain obvious merits. It carries the structural message systematically and persuasively, with diagrams and examples. It offers an up-to-date integration of a wide range of information, from scientific and literary writings in French and English, that can serve as an antidote to the two current associationisms that the author dislikes. The image of psychology taken away by the reader will be more coherent than associative, more sympathetic than mechanical, and more humanistic than quantitative.

Helping the Community Help Itself

William W. Biddle with Loureide J. Biddle

The Community Development Process: The Rediscovery of Local Initiative. New York: Holt, Rinehart & Winston, 1965. Pp. xiv + 334.

Reviewed by SEYMOUR B. SARASON

The first author, William W. Biddle, is Administrator of the Church and Community Cooperative of the Board of National Missions, United Presbyterian Church. His PhD in social psychology is from Columbia. He is author of *The Cultivation of Community Leaders and Growth toward Freedom*. The reviewer and the editors have been unable to find data on the co-author, Loureide J. Biddle.

The reviewer is Seymour B. Sarason, Professor of Psychology and Director, Psycho-Educational Clinic, Yale University. His PhD is from Clark University and he is one of the co-authors of Psychology in Community Settings, recently reviewed in CP.

THIS BOOK describes how the authors, in the role of "community developers," applied their knowledge and conceptions in helping two communities (one rural and the other urban) "design and redesign their environments." In addition to these two case histories, which take up a relatively small part of the book, there is an elaboration of the basic conceptions underlying "the rediscovery of local initiative," and the many problems which the community and the community developers encounter.

To someone not familiar with this area of problems and professional practice this book will probably not be viewed either as a contribution to science—there are no "hard data" to speak of—or to practice because the case histories lack the descriptive detail necessary to allow the critical reader to judge just what went on. To those who have engaged themselves in this area the response is likely to be that the authors obviously know what they are talking about and, equally important, that there is probably more consistency between their basic conceptions and their practices than one is accustomed to find in this literature. The wisdom of the authors is best reflected in the following (page 59):

"Among the reasons why the literature of community development is so inadequate is the difficulty of communicating richly meaningful experience through the medium of words. The words can convey meaning only if the reader has passed through similar experiences. But if his point of view has been such as to limit his contacts with people to responses that support distrust, then the account will lack persuasiveness.

"If the reader has known people only in situations that call for an acquiescent or even subservient behavior, he will scarcely be able to convince himself that such people can have original

ideas, or initiative. If, because he has assumed them to be self-seeking, and they prove to be just that in situations where no other response is appropriate, then generous behavior will seem well-nigh impossible.

"COMMUNITY development processes, resting upon optimistic assumptions about people, tend to bring forth behavior that the worldly-wise doubt is possible. The reader may be called upon to understand and believe human responses that contradict his previous experiences and beliefs.

"The reader is asked further to understand a method of influencing people that neither seeks to control them nor waits for them to ask for help; it is neither directive nor permissive. The first approach demands a prechosen response; the second abdicates responsibility. The method based on optimism about people's potential for development takes the initiative to awaken initiative in others. It seeks to help them discover their own abilities and good impulses, which they often have not realized they possessed.

"Participants in the process of development are not urged to seek control over others, not even over those who have dominated them. They are urged rather to share ideas, points of view, and control, because even the power of figures of a community ought also to be afforded an opportunity to develop. Development for people of low status frequently means an increase in their influence. For those who already exercise control over others, it often means the humbling discovery that they are happier and more human when they share the decision making."

To some this quotation will seem folksy, or sentimental, or philosophical, or even mystical. To me it means that the Biddles have taken a stand on the important issue of the conditions in which individuals and groups change. That the authors have not "proved" their stand I would not deny—nor would the authors, I suspect. As I see it, the problem of proof will become tractable after there is clarity about what con-

stitutes adequate description, i.e., what constitutes an adequate description of the community development process? A good case history is not a collection of anecdotes, but rather an ordered description which permits the reader to do at least two things: to determine if the description of the overt behavior rings a bell in his mind, and to evaluate the relationships between such behavior and the basis on which it was ordered, i.e., the concepts used to select what was to be described. This is a complex job when one is dealing with an individual or the ring dove; it is staggering to the mind when one's object is the community development process.

Montessori Today

E. M. Standing

The Montessori Revolution in Education. New York: Schocken Books, 1966. Pp. 206. \$1.95.

Reviewed by KENNETH D. FEIGENBAUM

The author, E. M. Standing, first met Maria Montessori in 1921 and spent the next thirty years working in close collaboration with her. He is author of Maria Montessori: Her Life and Work.

The reviewer, Kenneth D. Feigenbaum, did his dissertation with Helen Koch on Piaget at the University of Chicago where he received the PhD in 1961. He has taught at Monteith College, Wayne State University, and at Brandeis. Since 1965 he has been Associate Professor of Psychology and Research Associate in the Office of Program Development and Research in Education, Antioch College. He calls himself an "experimental epistemologist," generally interested in social learning, the social psychology of education, and socialization.

E. M. STANDING's *The Montessori Revolution in Education* is essentially an attempt by one of the 'directoress's' closest followers, admirer, and disciple, to present to the general public the essence of her philosophy and its meaning for the education of the child. Employing the language of adoration, he conveys to the reader the principles of the system through example, anecdote, and picture.

The book consists of three parts: Part One is an explanation of the fundamental principles of the Montessori Method. Included are such principles as "the physical metamorphosis of the child," "the work of the child and of the adult compared," "the non-interpretation of the teacher," "respecting the inner rhythm of the child's life." Part Two consists of fifty or so pictures of children 'working' in Montessori schools on the various materials, with explanation by the author as to what is occurring. The anecdotes in Part Three concern such topics as "The Role of the Directress," "Is Work Natural," and "Training the Will." At the end of the book there is a brief section about the Montessori revival in the United States, a restatement of Montessori's contributions, and an appendix listing the "Twelve Points of the Montessori Method."

The title comes from Standing's view that "the historian of the future will look upon Maria Montessori as the representative and interpreter of a great social movement which centered, and still centers, around the child." Her system, like the student-centered approach in education or the client-centered one in psychotherapy, has at its philosophical base a disguised vitalism, combined with 20th Century romantic revivalism, which in an overstated form claims that the child, or the client, or the student, knows inherently what is best for himself.

STANDING talks a good deal of "education by means of liberty in a prepared environment." The question of what is freedom for the child, like the old philosophical question, 'what is freedom,' is a mute one. The child is free to repeat an exercise as many

times as he wants according to Standing because "instinctively he knows when the process is complete, just as a normal person knows when he has eaten enough." But why is the child turned away from using the materials provided in ways other than the prescribed way? Does not 'instinct' also tell him, then, what is proper and right?

It is a shame that the understanding and warm hearted 'directress' committed to the importance of developing creativity in the child, did not discover a 'sensitive period' for fantasy. For, as so many psychologists have pointed out, the pre-conscious plays a major role in creativity. Yet Standing still equates fantasy with wasted mental exercise.

To the credit of the pedagogical techniques of Montessori, there is a recognition—à la Piaget—of the necessity of a psychological match between the thought processes of the child and the structure of material that will maximize the learning process. Additionally, the other concepts employed both in Montessori and non-Montessori schools, such as emphasis upon intrinsic motivation, each child working at his own pace, 'learning by doing,' have a great appeal to the reviewer.

The returns on Montessori and her method are far from 'being in.' In order to get a 'better picture' of the contribution it can make to American education and a fuller understanding of it, many different questions need to be asked. Among such as:

In what setting did her ideas emanate? Is the Montessori 'sensitive period' concept only a precursor to Piaget and Erikson? Has genetic psychology in the last twenty years gone beyond Montessori and, if so, what does Montessori have to offer today? What do children in a Montessori school learn? Are the claims of Montessori's method actually borne out by empirical evidence?

Many psychologists, educators, and parents await with great interest the answers to these questions.



Fatigue—A Text at Last

Heinz Schmidtke

Die Ermüdung: Symptomen, Theorien, Messversuche. 1. Hans Huber, 1965. Pp. 339. 1. Fr./DM48.—

Reviewed by J. ALFRED LEONARD

The author, Heinz Schmidtke is now the head of the Institut für Ergonomie der Technische Hochschule, München. He has had a long association with the Max Planck Institute and has had a large number of publications in the area of human performance measurement, with particular reference to stress and fatigue.

The reviewer, J. Alfred Leonard, is a member of the External Staff, Medical Research Council; has had some fifteen years in Cambridge, most of it with the Applied Psychology Research Unit; and has been at the University of Nottingham since 1965. His main interests are choice reaction times, pattern recognition, keyboard training, and the mobility of blind people. His background is research in experimental psychology with an emphasis on human engineering.

THERE is a surprising lack of books on human fatigue. The topic is of interest to the scientists in its own right, and as a means of making inferences about normal functioning on the basis of breakdown patterns. For the practitioners, in a society dominated by the concept of enlightened self-interest, it is important to have knowledge about the conditions bringing about fatigue and about the measures required to keep it within acceptable limits. Professor Schmidtke has put us all in his debt in producing this long overdue text and in facing the enormous difficulties arising from the complexities and ramifications of the subject matter.

He is eminently qualified to do so, for his own work covers almost the whole range of topics within this broadly sprawling subject. Moreover, almost alone among contemporary Ger-

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man psychologists, he has incorporated much of the current 'human factors' approach in his thinking. The book itself is broadly divided into two halves, one dealing with 'physical' fatigue, the other with 'mental' fatigue. Each half begins by delineating the area, proceeds along roughly similar lines to describe symptoms and findings, and concludes with a section each on theory and measurement. It is addressed to both scientists and practitioners. There are 798 references, with the latest in 1964.

There is only one serious critique on the content of the book. It just, but only just, fails to make explicit the difference between the 'physical' and the 'mental' systems: in the former we are primarily concerned with the transfer of energy, in the latter with the transfer of information. It is around the failure to make this difference explicit that difficulties of exposition arise; e.g., while it is relatively easy to specify the input to the energy transferring system, it is much more difficult to do so for the other system. It is perhaps this failure which makes Professor Schmidtke persist, in spite of his own elegantly designed experiments, in maintaining parallels between the two systems—parallels which may be more confusing than helpful.

THE sections on methodology are crucial to one's understanding of both findings and theories. It might be helpful if they appeared earlier in the sequence or if there were stronger cross-referencing. Two minor surprises are the lack of references to individual differences and to the methodology of secondary tasks.

They may well be there, but the layout of the book is such that it may take the reader a good many times of reading before he finds the pearls. There is virtually no attempt to make the process of information assimilation easy by a unified form of tables, diagrams, and summaries. There are few subheadings, and none at the top of each page. The references are numbered, but no dates are given when they appear in the body of the book. This makes it hard to assess their chronological importance without referring to the bibliography.

This book is intrinsically of tremendous usefulness. To the extent that it is written in *Gelehrtsdeutsch* the going is hard for those not familiar with that genre. My own lectures on the topic of fatigue will, I trust, benefit from having this book on my shelf, but I rather doubt whether a German practitioner will find there the answer to a directive from on high. It is only fair to say that Professor Schmidtke is well aware of this, although he attributes the paucity of guidelines to his subject matter. He does himself an injustice, for what he has assembled shows patterns which might with benefit be made more easy to see.

Personality Research: Methods and Data

Donn Byrne

*An Introduction to Personality:
A Research Approach.* Englewood Cliffs, N. J.: Prentice-Hall, 1966. Pp. viii + 552. \$7.75.

Donn Byrne and Marshall L. Hamilton (Eds.)

Personality Research: A Book of Readings. Englewood Cliffs, N. J.: Prentice-Hall, 1966. Pp. xiii + 411. \$5.50.

Reviewed by HARRY F. GOLLOB

The author, Donn Byrne, received his PhD from Stanford in 1958 and has been at the University of Texas where he is now Professor of Psychology since then. He has published in the general area of personality and social psychology and has been particularly active in the study of interpersonal attraction. He is author with Lindgren and Petrinovitch of *Psychology: An Introduction to a Behavioral Science* and editor with

Philip Worchel of *Personality Change*. Marshall Hamilton, co-author of the book of readings, received his PhD from the University of Texas and is currently Assistant Professor of Psychology at Washington State University. His research is in the areas of experimental personality dynamics, motivation and attitude, and social learning and personality development.

Harry F. Gollob, received his PhD from Yale University under Robert Abelson in 1965, and has been at the University of Michigan as Assistant Professor of Psychology and as Assistant Research Psychologist in the Mental Health Research Institute. He has taught an undergraduate course on the experimental study of personality and he does research in the areas of attitude change, impression formation and social reasoning, and in statistical methodology.

BYRNE's text grew out of his efforts "to introduce students to personality as a field of research." The central goal of his text is to help student gain an understanding of the scientific method is used in studying behavior in general, and personality in particular. In accord with this goal Byrne devotes extremely little discussion to the wide-band personality theories such as psychoanalytic, learning, Neo-Freudian, and field theory. Instead he focuses on discussion of methodological issues and presentation of empirical research.

The over-all structure and organization of the text is very appealing. The methodology section (which comprises $\frac{1}{4}$ of the text) is divided into chapters which discuss and illustrate research approaches which have been used in studying (a) the measurement of behavior, (b) the antecedents of individual differences, (c) personality structure, (d) personality dynamics, and (e) personality change. In the second half of the text, each of these aspects of personality research is then used as a subheading within chapters which discuss each of the following five personality variables: authoritarianism, need for achievement, manifest anxiety, intelligence, and self-concept. The tightly knit organization of the text is further enhanced by the presence of good chap-

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ter summaries and by liberal use of headings and subheadings.

THROUGHOUT the book, Byrne presents descriptions of many empirical investigations. In the methodology chapters a few illustrative examples quite effectively convey to the reader a reasonably accurate conception of how the E's proceeded in their work. Unfortunately, however, the text sometimes lapses into little more than a listing of examples of a particular research approach. It is the reviewer's feeling that the two or three detailed examples in each section would have more impact if they weren't followed by long series of briefly presented examples.

For the most part, Byrne's chapters on selected personality dimensions adequately present some theoretical background relevant to the particular dimensions under consideration, discuss particularly well the development of measurement techniques, and summarize several relevant studies in enough detail to enable the reader to gain a reasonably meaningful understanding of the research methods used and of the conclusions drawn. As in the methodology section, however, Byrne's descriptions of a great many empirical studies sometime become a little tedious as the list of relevant experiments grows.

Theorizing and speculation play a minor role in the text. Although Byrne discusses theoretical considerations directly relevant to the empirical studies he summarizes, the reviewer feels that the interplay between theory and observation isn't brought out very effectively. On the other hand, the effect which previous research can have in guiding future research efforts is nicely illustrated. In this same general vein, Byrne tends to discuss alternative explanations of the data only when he can then present data relevant to the alternatives. He does this well, but the reviewer considers it unfortunate that alternative interpretations of data, specific suggestions for future research, and speculation are not given somewhat freer rein in the text.

THE structure and content of the book of readings by Hamilton and Byrne

is extremely well tuned to Byrne's text, but the readings are also sufficiently general to allow it to be used independently or as a supplement to other personality texts. Most of the articles reprinted in the book of readings are discussed more briefly in Byrne's text. Well written commentaries at the beginning of each chapter very briefly put the studies into historical perspective, summarize the main point of each study, and point out one or two im-

portant relationships between the studies in each chapter. The main advantage of this paperback book is its price of \$5.50.

For teachers who would like their students to use a personality text which emphasizes methodology, empirical research relevant to a few important personality variables, but gives very little attention to the global, holistic theories of personality, this text is worth giving close

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The list includes some books in other languages, including the Ukrainian. For these items the language is indicated in parenthesis.

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MIKHAILOVA-LUKASHEVA, V. D. *Kogda chelovek stareet* (When man ages). Minsk: Nauka i Tekhnika, 1965. Pp. 184.

Adolescence

KRUTETSKII, V. A. and N. S. LUKIN. *Psikhologiya podrostka* (Psychology of adolescence). Moscow: Prosveshchenie, 1965. Pp. 316.

Animal Behavior

MAZOKHIN-PORSHNYAKOV, G. A. *Zrenie nasekomykh* (Insect vision). Moscow: Nauka, 1965. Pp. 263.

UZHDAVINI, E. R. and V. K. SHEPELEVA. *Ocherki razvitiya vrozhdennogo povedeniya* (Development of instinctive-nutritive behavior). Moscow-Leningrad: Nauka, 1966. Pp. 120.

Bibliographies

BARYKINA, O. A. (Chief Ed.) *Nauchnye s'ezdy, konferentsii i soveshchaniya v*

SSSR, 1954-1960. I. Obshchestvennyye nauki; II Matematika, Estestvoznaniye, Izuchenie proizvoditel'nykh sil (Scientific meetings in the USSR, 1954-1960. I. Social studies; II. Mathematics, natural sciences, economics). Moscow: Nauka, 1966. Pp. 111, 216.

CHERNOVA, E. N. (Chief Compl.) *Sistematicheskii katalog otechestvennykh periodicheskikh i prodolzhayushchikhsya izdanii po meditsine, 1792-1960* (Classified catalogue of Russian and Soviet medical periodicals and serials, 1792-1960). Leningrad: Biblioteka Akademii Nauk SSSR, 1965. Pp. 495. [2,191 entries.]

LYUBARSKII, YA. YU. (Ed.) *Rukovodstvo po meditsinskoj bibliografii* (Guide to medical bibliography). Moscow: Meditsina, 1965. Pp. 192.

RYABINOVSKAYA, A. M. (Chief Compl.) *Elektroentsefalograficheskie issledovaniya v klinike* (Research in medical electroencephalography: bibliography for 1928-1963). Moscow: Nauka, 1966. Pp. 82. [1,342 Russian entries.]

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AMOSOV, N. M. *Modelirovanie myshleniya i psikhiki* (Modeling of thinking and other psychological processes). Kiev: Naukova Dumka, 1965. Pp. 304.

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GERHARD ADLER. *Studies in Analytical Psychology*. New York: C. P. Putnam's Sons, for the C. J. Jung Foundation, 1966. (First printed in 1949) Pp. 250. \$7.00.

First published in 1949, this book undertakes to introduce the reader to the analytical psychology of C. G. Jung and, more particularly, to some of the technical aspects of treatment as carried out in this theoretical framework. In illustrative case studies, the author gives attention to the interpretation of dreams, to concepts of the collective unconscious, and to the archetypes. Consistent with the Jungian position, emphasis is given to the particular psychological problems associated with different phases of life, the role of religion as a therapeutic element and to the self-regulating psyche which controls individuation and integration of personality.

RALPH HEINE

JAMES A. BRUSSEL and GEORGE L. CANTZLAAR. *The Layman's Dictionary of Psychiatry*. New York: Barnes & Noble, 1967. Pp. xiv + 269. \$1.95.

A relatively inexpensive paperback that may be useful to undergraduate and graduate students in psychology who have clinical interests and who function in a medical setting. Definitions cover a wide range of terms and are typically simple and clear.

I. JAY KNOPF

A. H. CHAPMAN. *Textbook of Psychiatry: An Interpersonal Approach*. Philadelphia: Lippincott, 1967. Pp. xiii + 480. \$10.50.

Primarily written for medical students and physicians, this text covers

the traditional range and classifications of psychiatric disturbances. It emphasizes the "interpersonal approach" to psychiatry. Clearly written and organized with a representative bibliography, this text should be called to the attention of those CP readers who are involved in teaching medical students and psychiatric residents.

I. JAY KNOPF

PAUL R. FARNSWORTH (Ed.) OLGA MCNEMAR and QUINN MCNEMAR (Assoc. Eds.) *Annual Review of Psychology*. Vol. 18. Palo Alto, Calif.: Annual Reviews, Inc., 1967. Pp. ix + 606. \$8.50.

The latest in a well known and well regarded series of literature reviews, this eighteenth annual volume maintains the high standards of author selection that have characterized its predecessors. The categorical structure of these volumes is always changing, but always a little the same. It is the apparent editorial policy to provide through the years a mixture of recurrent topics ("audition" always seems to rate a yearly chapter), different slices of changing amorphous field (social psychology is represented each year by such different topic foci as "attitude change," "consumer psychology," or "group dynamics") and novel once-only integrations ("Status of Japanese Experimental Psychology"). This is a highly defensible strategy to preserve an adequate range of coverage without straying too far from the traditional rubrics useful for "entering" the literature of one's interest. In the current volume, sensory processes are represented by Mote's "Visual Sensitivity" and Zwislocki's "Audition." Johannsen covers the literature on "Perception" from 1963 to 1966.

As usual, there is good coverage of the standard areas of "Comparative Psychology and Ethology" (Scott), "Developmental Psychology" (Stevenson), "Educational Psychology" (Anderson), "Personnel Selection" (Guion), "Psychotherapy" (Ford and Orvaschel), and "Personality" (Klein, Barr and Wollitzky). Social Psychology is represented by the first return of "Group Dynamics" (Gerard and Miller) since 1961 and by Quinn and Kahn's chapter on "Organization Psychology." "Test Theory" (Keats) brings us up-to-date in an area not specifically covered for four years. Zubin contributes a review on "Classification of the Behavior Disorders." And finally, Becker and McClintock provide a much needed summary of studies concerned with "Behavior Decision Theory," a rapidly developing area integrating psychology and utility economics.

EDWARD L. JONES

FREDERIC A. GIBBS and ERNEST GIBBS. *Medical Electroencephalography*. Reading, Mass.: Addison-Wesley, 1967. Pp. vii + 79. \$10.50.

This concise book is designed as a handy reference for physicians who refer patients for electroencephalographic study, and for medical students, nurses, and technicians who need to know the clinical implications of electroencephalography. It is also intended for use as a reference in the EEG lab and as a supplementary text in courses in neurology.

The authors attempt to validate statistically the clinical significance of 47 specific EEG findings, 30 archetypical examples of which are illustrated in half-scale reductions for the original 8-channel tracings. The incidence of each of these findings—and of 38 different symptoms—is shown in more than 38,000 patients and 3,000 control subjects. Clinical implications of each finding are summarized in nontechnical language. A four-page Master Table correlates symptoms with each of 30 specific findings.

RALPH HEINE

HARRY H. HARMAN. *Modern Factor Analysis* 2nd. Ed. Chicago: Univer. of Chicago Press, 1967. Pp. xx + 474. \$12.50.

This revised version of Harman's authoritative text represents no very drastic shift in style or spirit from the 1960 first edition (reviewed by Kaiser in *CP*, 1961, 6, 374-376). A variety of minor changes have occurred: in organization, in notation, in conceptualization. The major new material is a chapter on the author's Minres method of factoring (a kind of cross between Principal Axes and Maximum Likelihood), and a section on Direct Oblimin, Jennrich and Sampson's technique for rotating factors to oblique simple structure.

JOHN C. LOEHLIN

LEON A. JAKOBOWITS and MURRAY S. MIRON (Eds.) *Readings in the Psychology of Language*. Englewood Cliffs, N. J.: 1967. Pp. xi + 636.

This is a well chosen collection of readings concerned with "those aspects of symbolic activity required to produce and understand natural languages." The papers are organized in sections entitled: "Some Major Theoretical Formulations"; "Experimental Approaches to Language"; "The Problem of Meanings." Many of the papers are recent and work related to transformational grammar is particularly well represented.

ROGER BROWN

CARL B. KAUFMANN. *Man Incorporate: The Individual and his Work in an Organized Society*. Garden City, N. Y.: Doubleday, 1967. Pp. 281. \$5.95.

This book is a lively and thoughtful historical-social examination of industry in society. It is not directly psychological but of potential interest as background readings in industrial and organizational psychology.

HAROLD J. LEAVITT

P. MOOR. *Heilpädagogische Psychologie. Band I. Grundtatsachen einer allgemeinen pädagogischen Psychologie*.

3rd Ed. Bern/Stuttgart: Hans Huber, 1967. Pp. 326. Fr./DM. 32.80.

This book is an eclectic approach to make "verstehende" psychology useful for therapy in educational psychology. All major systems, analytic, behavioristic, and Gestalt are examined as well as theories of Dewey, Häberlin, Spranger, Künkel, Hartmann, Jaspers, and Klage. A second volume, *Pädagogische Psychologie der Entwicklungshemmungen*, has been published in 1965. It examines ways by which the handicapped accomplish their goals and suggests these methods for the educator's general use.

FRANK WESLEY

JOSEPH R. ROYCE. *The Encapsulated Man*. Princeton, N. J.: Van Nostrand, 1964. Pp. xi + 206. \$1.95.

If a reviewer's task is to evaluate a book in terms of the author's goals, this volume presents enormous problems. As a vehicle for the presentation of the author's neo-Kantian ideas, it fails, for Royce's ideas are poorly developed, unclear, and not particularly original. As an attempt to bring diverse points of view into the main stream of psychology it is probably strongest particularly in the quotations from others. As an elementary integration of the "psychology of man"—and certainly the sweeping generalizations are only supportable on the basis of very elementary knowledge—the integration dissolves in constant contradiction. Probably the book would have benefited from additional editing. Despite all this, among the pot-pourri of ideas there are frequently valuable ones, probably for everyone, whatever their theoretical bent. Oh well, ". . . the head of a philistine is like a garbage pail where history has dumped the husks and shells of its outworn movements. . . ."

STEPHEN BINDMAN

HAROLD SACKMAN. *Computers, Systems Science, and Evolving Society: The Challenge of Man-Machine Digital Systems*. New York: Wiley, 1967. Pp. xviii + 638. \$14.50.

This is a big, wordy book about man-computer interactions, especially as they

take place in large computerized systems. The SAGE air defense system is Exhibit A, but Project Mercury and some others are discussed. The range is from the empirical (a factor analysis of computer programmer performance) to the socio-philosophical ("Some Parallels between Democratic Process and Experimental Methods"). Lots of tables, diagrams, and organizational charts.

JOHN C. LOEHLIN

CARMI SCHOOLER and SOLOMON E. FELDMAN. *Experimental Studies of Schizophrenia*. Goleta, Calif.: Psychonomic Press, 1967. Pp. v + 260. \$9.75.

This is a very valuable book that abstracts and summarizes the growing literature on schizophrenia during the years 1950 through 1965. The authors carefully included only those articles in which the central focus is on some aspect of adult schizophrenia and where data are quantitatively presented and statistically analyzed. There are more than 950 articles included and abstracts are not only reported in a "standard format," but also organized under meaningful and useful groupings. The authors have provided an extremely important and useful service to both students and investigators who are involved in the study of schizophrenia.

I. JAY KNOPP

RICHARD C. TEEVAN and BARRY D. SMITH. *Motivation*. New York: McGraw-Hill, 1967. Pp. xiv + 172. \$2.50.

It would be difficult to determine simply, from an inspection of this book, whether it would function effectively as a programmed text in the field of motivation. Many of the right words could be learned by its use but the student would doubtless be left with the impression that certain conceptions of very questionable value are already verified beyond the need for further examination. An unusually large percentage of the references (72 out of 83) were written prior to 1960, and of the 11 that were not, 4 are hard-to-get ONR reports by the editors and their associates.

JUDSON BROWN

RENE ZAZZO, MICHEL GILLY, and MINA VERBA-RAD. *Nouvelle Echelle Metrique de L'Intelligence: Tests de Developpement Mental pour Enfants de 3 a 14 Ans.* Vols. I & II. Paris: Librairie Armand Colin, 1966. Pp. 192 & 96. F. Fr. 28.—.

Vol. I, *Principes de Construction et D'Utilisation*, describes historically the Binet-Simon test in France, particularizing the resistance towards a revision, the dependence on the re-translated Terman and Merrill scale, and Zazzo's standardization in 1949. It describes the need and the development of the new metric scale, the rationale for the selection of its items, its standardization and subtest selection, an endeavor which took a total of six years. Vol. II, *Technique D'Application*, contains test booklet and scoring instructions. The new scale is composed of original and modified items selected from Binet-Simon, Terman and Merrill, Wechsler, and others. It covers an age range from 3 to 14, providing conventional IQ scoring in terms of mental age as well as standardized scales for ages 12-14.

FRANK WESLEY

BOOKS RECEIVED

AXLINE, VIRGINIA M. With an Introduction by LEONARD CARMICHAEL. *Dibs: In search of self.* New York: Ballantine Books, 1964. Pp. 220. \$7.5.

BARTLEY, S. HOWARD. *The human organism as a person: principles of optometry.* Philadelphia: Chilton, 1967. Pp. xv + 221. \$8.50.

BERNARD, C. G. and SCHADÉ, J. P. (Eds.) *Developmental neurology.* (Progress in Brain Research, Vol. 26) New York: Elsevier, 1967. Pp. 258. \$16.00.

BIRNBAUM, MARTIN L., HARM, MARY GAY, and ORTON, SELMA B. *The content for training in project ENABLE.* New York: Child Study Association of America, 1967. Pp. 85.

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CHANCEY, VIRGINIA C. (Prepared by) Special Programmed Sections by WENDELL I. SMITH. *Study guide for psychology: Understanding human behavior.* (Sartain/North/Strange/Chapman) 3rd Ed. New York: McGraw-Hill, 1967. Pp. vii + 197.

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ELIASBERG, WLADIMIR G. *The lie detector.* New York: Lafayette Press, 1941. Pp. 120. \$3.85.

ELLIS, WILLIS D. (Prepared by) With an Introduction by K. KOFFKA. *A source book of Gestalt psychology.* New York: Humanities Press, 1967. Pp. xiv + 403. \$7.50.

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KENT, GEORGE. *The effects of threats.* Columbus, Ohio: Ohio State University Press, 1967. Pp. 113. \$2.00.

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MALRIEU, PHILIPPE. *La construction de l'imaginaire.* (Psychologie et Sciences Humaines) Bruxelles: Bessart, 1967. Pp. 246.

MASTERS, R. E. L. (Ed.) *Sexual self-stimulation.* Los Angeles: Shoeborn, 1967. Pp. 352. \$7.50.

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PICKFORD, R. W. *Studies in psychiatric art: Its psychodynamics, therapeutic value, and relationship to modern art.* Springfield, Ill.: Thomas, 1967. Pp. xix + 340. \$14.00.

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TAFT, RONALD. *From stranger to citizen: A survey of studies of immigrant assimilation in Western Australia.* London: Tavistock, 1966. Distributed in the US by Barnes & Noble. Pp. xiv + 108. \$6.25.

WOLFENSTEIN, E. VICTOR. *The revolutionary personality: Lenin, Trotsky, Gandhi.* Princeton, N. J.: Princeton University Press, 1967. Pp. x + 330. \$7.50.

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The Little World of William James

Gay Wilson Allen

William James: A Biography. New York: Viking Press, 1967. Pp. xiv + 556.

Reviewed by ROBERT G. WEYANT

The author, Gay Wilson Allen, received a PhD in English from the University of Wisconsin and is Professor of English, New York University. He is author of *The Solitary Singer: A Critical Biography of Walt Whitman*, winner of the Tannenberg Award for best biography of the year, 1955. He has also published in *New Republic*, *American Scholar* and the *Saturday Review*.

The reviewer, Robert G. Weyant, is Associate Professor of Psychology and Assistant Dean of Arts and Sciences, The University of Calgary, Alberta, Canada. He received his 1960 PhD under Spence at the University of Iowa and is currently teaching the history of psychology and is writing a cultural history of psychology.

It must be with a certain amount of trepidation that an author approaches the task of writing a biography of a subject such as William James. In the first place, it is an obviously difficult task to attempt to capture in words the changing, probing, and, at times, soaring personality which one senses in William James's writings; the kind of personality which has led A. A. Roback to comment, "He may have been an outstanding philosopher and a great psychologist, but as a personality he was a genius." Secondly, there is

the incredibly wide range of James's intellectual interests. Simply becoming acquainted with the background material necessary for an understanding of William James's thought is an imposing task in and of itself. In addition, the James family belonged to that now almost vanished breed of human animal, the letterwriters. There are extant staggering amounts of correspondence to, from, and about the Jameses. Lastly, in this case there already exists a "classic" biography. Professor Alburey Castell has referred to Ralph Barton Perry's two volume *The Thought and Character of William James* as "The finest and fullest biography of any philosopher in any age." Under the circumstances, comparisons are inevitable. Perry's work still stands as the definitive biography, but in his own way Gay Wilson Allen has provided a first rate portrait of the most outstanding of American psychologists.

In actuality, this book is a biography of the whole urbane, talented, and neurotic James family. Allen has attempted, and with no little success, to present William James as much as a son, brother, husband, and father, as a scholar, teacher, psychologist, and philosopher. Given the subject, it is almost impossible to imagine anyone writing a dull biography of William James. But

Allen's work is more than just interesting. By a very skillful use of selections from published writings and letters, he has managed to create a dialogue which has the admirable effect of putting the reader into James's sitting room and study as an observer and, at times, almost a participant in the disputations which seem, inevitably, to have arisen. He has been able to evoke the charm and fascination of the preWorld-War-I life led by the fortunate few who had money, leisure, and culture. His description of a typical day in the life of Professor James of Harvard College seems far removed from that of the majority of present day pedagogues.

"During the academic year William James worked more or less all day, not because his academic duties were so heavy that he could not otherwise perform them, but because he was unsystematic and could not work to a schedule, so that he always had unfinished tasks or plans. Besides, he carried on an enormous correspondence with friends, in addition to the correspondence regarding "psychic research," and he had not yet acquired a typewriter or a secretary—except occasionally his wife, to whom he dictated letters, as we have noticed, when his eyes failed him. On a typical morning he would leave his home at about twenty minutes to nine to attend the fifteen-minute service in the College Chapel before classes began. He did not forget to wear his tie so that Alice had to run after him with it, as Royce's wife did, calling "Royce! Royce!" But he grabbed whatever coat was handy, often the old Norfolk jacket which he liked to wear in his study, or even his formal black coat.

After Chapel Professor James would meet his classes, go to the library for books, possibly "look in" on the psychological laboratory if some of his students were performing experiments, or visit a book store. If he returned home for lunch

instead of eating with colleagues at the faculty club (Colonial Inn), he would likely be late and in a great hurry because students had asked so many questions after class. Royce remembered having once stood ankle-deep in snow at James's gate arguing about the "Absolute" while their lunches grew cold. In the afternoon James often but not always took a short nap, then read or wrote until he was tired and felt the need of fresh air. For recreation he would take a walk or, in good weather, ride his bicycle. On his return he would resume reading or writing, probably in the library; he seemed to be able to write a letter and carry on a conversation at the same time. To finish an important lecture he would go to his cubby-hole upstairs, but he kept his door open and from time to time would pop out to comment on some remark he had overheard in his children's conversation."

One is tempted to ask "But when did he fight for time on the computer?" and "When did he write up his grant applications?"

At times Allen has played the role of psychologist himself, attempting to assess the complex and convoluted motivations which lay behind William James's behavior. Thus, commenting on James's early manhood, Allen writes,

"As early as the Boulogne-sur-Mer days, as we have seen, [Henry James, Sr.] had believed William's special talents to be scientific, and had encouraged him in various ways to prepare for a career in science and not be diverted, for example, by painting; yet for many years he had also felt that most scientists were blind to the spiritual counterpart of the physical world. They were not satisfied with limiting their knowledge to what they could measure; they seemed to think that whatever could not be measured either didn't exist or was of no importance. Although William would never be able to believe in, or even understand, his father's Swedenborgian spiritual world, he had come to suspect that not all mental life could be accounted for, or mental and nervous aberrations treated, physiologically. As a teacher of physiology he used the methods and nomenclature of science, but he had a growing conviction that the results of the scientific method were more limited than the scientists realized. He had found by experience that what he believed affected his digestion, sleep, and emotions. He did not doubt in the least that his organic functions also affected his mind, but the process could

be reversed as he had found by reading Renouvier, Wordsworth, and Goethe.

Thus William James's "effusion" to his father marked a milestone not only in his gaining a measure of control over his neuroses (complete control would never be possible), but also in his progress toward the essays and books in psychology and philosophy which he would later write. But for a person of his temperament and character the progress could not be orderly and consistent. The journey must be made without a map and might be treacherous. His first problem was to survive, but in the act of surviving from day to day he might be able to form some useful hypotheses."

It would have been easy for Allen to overdo this sort of thing. Fortunately, he has not done so. We have been spared, thank heavens, a Freudian interpretation of the James family. Instead, Allen has limited himself to the obvious and well-documented neurotic symptoms, hysterical illnesses, and depressions to which the James siblings, particularly William, Henry, Alice, and Robertson, seem to have been heir. Again, he has wisely avoided any speculations on the necessary, or otherwise, connections between neuroticism and talent.

TALENT, of course, is the central theme of this work. The cast of this biography is made up of a seemingly endless stream of artistic and scientific personalities, the cream of the 19th century intellectual world. These include not only the psychologists and philosophers who might have been expected to be attracted to James, and vice versa, but, in addition, writers, artists, theologians, and thinkers of every nationality and persuasion whom he came to know through his father and his brother. It is worth taking a moment to record just a partial list of these individuals since the stimulation of their company may go far to explain at least part of William James's own vibrant intellectualism. His friends, acquaintances, colleagues, teachers, and students included Henry Adams, Louis Agassiz, James Mark Baldwin, Henri Bergson, William Cullen Bryant, Thomas Carlyle, James McKean Cattell, G. K. Chesterton, John Dewey, Wilhelm Dilthey, Emil DuBois-Reymond, Charles W. Eliot,

Ralph Waldo Emerson, Sigmund Freud, G. Stanley Hall, Herman Von Helmholtz, Ewald Hering, William De Howells, Pierre Janet, Carl Gustav Jung, George Henry Lewes, Henry Ward Longfellow, William McDougall, Ernst Mach, John Stuart Mill, C. Lloyd Morgan, Hugo Münsterberg, Charles Peirce, Ralph Barton Perry, Theodore Roosevelt, Josiah Royce, Bertrand Russell, George Santayana, Gertrude Stein, Carl Stumpf, Alfred Lord Tennyson, William Makepeace Thackeray, Henry Thoreau, Edward L. Thorndike, Mark Twain, H. G. Wells, and Wilhelm Wundt. Their company continued throughout his entire life from Emerson who first gave his blessing to young William when the latter was less than three months old, to Henry Adams to whom some of William James's last letters were addressed.

But perhaps the question of greater interest to psychologists is that concerning the place of William James in the history of psychology. As with most of James's characteristics, his role as a psychologist is difficult to pigeonhole. Almost unquestionably, some among our colleagues would deny that he was a psychologist at all since he never ran a rat or implanted an electrode. Here, as in everything else, William James is a study in contrasts. His letters particularly indicate that he was not personally charmed by the routine of laboratory work. As early in his career as when he was working on a thesis for his MD he commented, "I shall not make any experiments for my thesis but just compile what I find in the books under my hand." Alternatively, he is credited by some with founding the first psychological laboratory, and the initial course which he taught at Harvard was a laboratory course entitled "The Relations Between Physiology and Psychology."

THERE are at least three points to be made in attempting to understand the relationship between William James and psychology. First, James was one of those rare people who can divorce what they personally enjoy from what they know intellectually to be necessary. Thus, we have him writing of German

experimental psychology in the "Principles."

"Within a few years what one may call a microscopic psychology has arisen in Germany, carried on by experimental methods, asking of course every moment for introspective data, but eliminating their uncertainty by operating on a large scale and taking statistical means. This method taxes patience to the utmost, and could hardly have arisen in a country whose natives could be *bored*. Such Germans as Weber, Fechner, Vierordt, and Wundt obviously cannot, and their success has brought into the field an array of younger experimental psychologists, bent on studying the elements of the mental life, dissecting them out from the gross results in which they are embedded, and as far as possible reducing them to quantitative scales. The simple and open method of attack having done what it can, the method of patience, starving out, and harassing to death, is tried; the Mind must submit to a regular siege, in which minute advantages gained night and day by the forces that beat her in must sum themselves up at last into her overthrow. There is little of the grand style about these new prism, pendulum, and chronograph-philosophers. They mean business, not chivalry. What generous divination, and that superiority in virtue which was thought by Cicero to give a man the best insight into nature, have failed to do, their spying and scraping, their deadly tenacity and almost diabolic cunning, will doubtless someday bring about."

Clearly, experimental psychology of the Teutonic variety was not William James's meat. Nevertheless, he *did* establish a laboratory at Harvard, he *did* go out of his way to bring Münsterberg to Cambridge to carry on the work which James, himself, did not want to do but which he knew must be done. Commenting on his own *Principles of Psychology* in a letter to his brother Henry, William James wrote,

"As 'Psychologies' go, it is a good one, but psychology is in such an ante-scientific condition that the whole present generation of them is predestined to become unreadable old mediæval lumber, as soon as the first genuine tracks of insight are made. The sooner the better for me."

The second point which should be mentioned in discussing William James's place in psychology is his feeling that psychology was a very personal dis-

cipline. It dealt with people, not behavior in some abstract sense. The sources of information were both other individuals and one's own consciousness. These were not popular ideas among psychologists even in James's time.

James said:

"You can't divorce psychology from introspection, and immense as is the work demanded by its purely objective physiologic part, yet it is the other part for which a professor thereof is expected to make himself publicly responsible."

Finally, there was James's feeling that one does what one must, but a man must do more than spend his life working in some dusty corner of knowledge if he is going to be a whole man. He once remarked, "I think a professor, in addition to his *Fach*, should be a *ganzer Mensch*." To Flournoy he wrote,

"As regards research, I advise you not to take that duty too conscientiously, if you find that ideas and projects do not abound. As long as a man is working at anything, he must give up other things at which he might be working, and the best thing he can work at is usually the thing he does most spontaneously. You philosophize, according to your own account, more spontaneously than you work in the laboratory. So do I, and I always felt that the occupation of philosophizing was with me a valid excuse for neglecting laboratory work, since there is not time for both. Your work as a philosopher will be more *irreplaceable* than what results you might get in the laboratory out of the same number of hours. Some day I feel sure that you will find yourself impelled to publish some of your reflections. Until then, take notes and read, and feel that your true destiny is on the way to its accomplishment!"

What emerges from all of this is the picture of a man who was able to take the best from two worlds. Not being a product of the "behaviorist revolution," he was relatively unselfconscious about using the casual introspections of himself and others where it seemed appropriate and sensible to do so. It is this characteristic which has made the *Principles of Psychology* such a classic that it can be read with enjoyment and with profit by psychologists today. Which of our current introductory texts will stand that test in eighty years? On the other hand, he clearly recognized

that a psychology made up of *nothing but* casual introspections was not likely to be productive. And so he encouraged others to do the laboratory work which he avoided, and he made use of the results of that work as well as the introspections. Thus it is that we find William James so difficult to classify. He does not fit into the greatly oversimplified stereotype of the hard headed, scientific psychologists vs. the soft headed, unscientific psychologists. He probably would not have given a damn whether a student received a BA or BS degree in psychology, but he would have been concerned about what the student had *learned*.

SPEAKING strictly from the point of view of a psychologist, there are some aspects of this book which could have been developed more than they were, for example, James's relationships with other psychologists. He carried on an extensive correspondence with the Swiss psychologist, Théodore Flournoy, the bulk of which has recently been published and makes for most enjoyable reading (*The Letters of William James and Théodore Flournoy* edited by Robert C. LeClair, University of Wisconsin Press, 1966). Also, the relationship between James and G. Stanley Hall has interesting but unexplored aspects to it. Allen's biography shows Hall as student, colleague, and friend, a picture substantiated by James's letters. Hall, in his autobiography, *Life and Confessions of a Psychologist*, tends to dismiss James rather tersely giving him two brief paragraphs in a book of over 600 pages and omitting him altogether from the index, although he admits that they had "a rather intimate acquaintance." While Hall comments that he was "immensely impressed and fascinated by his personality," there is no mention of any intellectual influence which James may have had upon him. This is particularly surprising in view of E. G. Boring's comment in his *History of Experimental Psychology* that "Hall received at the hands of James what is presumably the first doctorate of philosophy in the new psychology to be granted in America." There were some later disagreements between James and

Hall concerning the publishing of some journals and apparent bad feelings on Hall's part about who founded the first psychological laboratory in North America. In any event, Allen might have explored James's professional relationships with non-Harvard psychologists to a greater extent.

The same type of comment might apply to Allen's picture of William James as a philosopher. Certain relationships such as those with Josiah Royce, Chauncey Wright, and C. S. Peirce are touched on, but these are mostly personal comments. William James's place in philosophy, particularly in Pragmatism, and his professional relationships to such men as Royce, Wright, John Dewey, and John Fiske are, in general, not developed. Similarly, the influence of Charles Renouvier on James's philosophy is mentioned a number of times but never fully explored.

In a sense, these remarks should not be taken as being critical. They simply are designed to make explicit the kind of biography which Allen has written. It is, on the whole, a personal biography rather than a professional biography. In 1947 when Ralph Barton Perry published his one volume "briefer version" of *The Thought and Character of William James*, he stated in the preface, "Some material and bibliographies have been omitted and James's thought has been set forth in terms that require no previous familiarity with technical problems of philosophy and psychology." His intention was clearly to make available for non-professional readers certain aspects of the more detailed two volume work. Allen has written a biography which can be enjoyed by the non-professional reader as well as the professional psychologist and philosopher. It was not intended, one would assume, as a detailed analysis of William James's scholarly work but, rather, as a portrait of a man. Indeed, Allen suggests this in the opening sentence of his preface where he comments, "William James was America's first world-famous psychologist and first renowned philosopher after Emerson, but most of his students and colleagues at Harvard thought he was greater as a man than as a scholar or teacher."

In this vein, Allen's chapter on Wil-

liam James's final illness and death is particularly moving. James never believed in a life after death although he was always interested in spiritualism. This latter interest did him no good professionally since it was considered to be quite unscientific. James's view, in contrast, was that the scientist should not reject any possibility out of hand, and that he was simply interested in determining whether there was any basis for this belief. Here again it becomes clear, at least in the case of the philosopher-psychologist, just how inextricable are his personal and professional views.

There was no lack of eulogies for William James. Allen includes one of the finest, that by John Jay Chapman,

"The world watched James as he pursued through life his search for religious truth; the world watched him, and often gently laughed at him, asking, 'When will James arise and fly? When will he 'take the wings of the morning, and dwell in the uttermost parts of the sea?'" And in the meantime James was there already. Those were the very places that he was living in."

Admittedly psychology has changed a good deal since William James's time and, unquestionably, some of the changes have been for the better. Certainly no one would ever confuse the regimented prose which fills our professional journals today with lyric poetry of Euterpe's inspiration. Without becoming maudlin, one might nevertheless admit that there is a certain nostalgic charm involved in learning that Gertrude Stein, then a student of William James, first published in the *Psychological Review* of 1896 and that the theme of her paper was the effect of repetition on memory ("Rose is a rose is a rose is a rose"). Changes, while they often bring gains, occasionally bring losses as well. In the process of becoming "scientific," psychology has come dangerously close to losing something valuable. In this sense, reading Gay Wilson Allen's work will be, for many psychologists, like reading the obituary of a childhood friend whom one had always felt one should have come to know a little bit better, if only one could have found the time.



Problematic Biologi Problema

Georges Thines

Psychologie des Anim Brussels, Belgium: Dessal. Pp. 352.

Reviewed by DAVID BELANGER

The author, Georges Thines, is Professor of Animal and Experimental Psychology at the University of Louvain, Belgium and Maître de Conférence, University of Nijmegen, Holland. His doctorate in psychology is from Louvain and he is author of *Contribution à l'Étude de la Causalité Perceptive. Ses intérêts are in sensory reactions and rhythmic activities in degenerated animals, on perceptual kinetic structures, and he has published a series of experimental studies on the blind*.

David Bélanger, the reviewer, received his training in psychology at the University of Montreal; he has also worked in Hans Selye's laboratory at Montreal and under Robert Malmö at the Allan Memorial Institute. His field is physiological psychology and he has published on electromyographical reactions in the human, on hyposectomized animals, and on motivation and activation. During the last ten years he and his colleagues have carried out a series of experiments on the cardiac activity in animals in learning and motivational situations.

THIS study on animal psychology does not pretend to be exhaustive. For instance, the American reader may notice with some surprise, and perhaps some disappointment, that the author has intentionally neglected the whole area of animal learning and intelligence, preferring to deal with questions considered to be of a greater and more direct psychophysiological interest, such as perceptive and orientating processes and migratory and instinctual behavior. A discussion of animal psychology which—at the same time as it deals with instinctual mechanisms—practically ignores the whole field of motivation, and

Here's what's happening in Psychology at HRW

CONTEMPORARY THEORY AND RESEARCH IN VISUAL PERCEPTION

Edited by RALPH NORMAN HABER, University of Rochester

Complete and up-to-date, these readings provide enough depth on each topic so that the student and the specialist can see not only some examples of data, but also some of the controversial issues

and problems that are still present. Over two-thirds of the articles have been published within the last five years.

April 1968

832 pp.

\$12.50 (tent.)

SOCIAL CLASS, RACE, AND PSYCHOLOGICAL DEVELOPMENT

Edited by MARTIN DEUTSCH, New York University, IRWIN KATZ, University of Michigan, and ARTHUR JENSEN, University of California, Berkeley

These articles focus on the environmental determinants of behavior. The overall purpose of the book is to present a balanced, objective exposition of the research dealing with the so-

called nature-nuture problem, particularly as it impinges on the issues of social class and racial differences. Sponsored by SPSSI.

August 1968

352 pp.

\$7.00 (tent.)

VERBAL LEARNING

By JOHN JUNG, York University, Toronto

Professor Jung presents an overview of verbal learning theory and research at the advanced undergraduate level. He employs the transfer of training approach with emphasis on the inter-relationships among the three main aspects of

verbal learning: acquisition, retention, and transfer. The topics included range from rote learning to situations involving mediational mechanisms such as concept tasks.

June 1968

192 pp.

\$6.00 (tent.)

LEARNING, LANGUAGE, AND COGNITION

Theory, Research, and Method for the Study of Human Behavior and Its Development

By ARTHUR W. STAATS, University of Hawaii

In this, the most comprehensive account available of learning and its relationship to the analysis of language, Professor Staats demonstrates that the principles and methods of experimental psychology—especially those of the psychology of learning—are also the building blocks from which to construct a general con-

ception of human behavior. This conception he defines as one which is basic to the various behavioral and social sciences, to the professions that deal with human problems, and to man in general.

January 1968

640 pp.

\$9.50

CONSUMER BEHAVIOR

By JAMES F. ENGEL, DAVID T. KOLLAT, and ROGER D. BLACKWELL, all of The Ohio State University

A comprehensive analysis of consumer behavior in which the authors (1) critically analyze relevant evidence from related disciplines as well as the field of marketing, (2) draw generalizations

from the evidence, and (3) pinpoint areas of needed research.

August 1968

608 pp.

\$12.50 (tent.)



Holt, Rinehart and Winston, Inc.
383 Madison Avenue, New York, New York 10017

where there is a conspicuous lack of any serious treatment of territorial behavior and social organization, leaves the reader with a feeling of imbalance. Selective as it is, this review is nevertheless well documented and presents a wide range of scientific data, most of which until recently were not to be found in the traditional books on animal psychology. The author, well known for his remarkable work on the perceptual orientating mechanisms of the blind cave-dwelling fish, speaks with erudition on a subject with which he is thoroughly familiar.

The short historical introduction, the lengthier methodological discussion which follows, and even the choice of problems are directed toward the development of what Professor Thines calls a "biological problematics," which seems to constitute the fundamental thesis of this book. Various interpretations are criticized for their reliance on Cartesian reflexology and/or narrowly mechanistic attitudes. A more favorable consideration of teleological explanations is propounded. This becomes particularly apparent when the author chooses to reject the more generally accepted lines of interpretation of orientating behavior in favor of Viaud's eccentric theory based on the rather whimsical notion of "pathies," which correspond to feelings of attraction or repulsion, distinct from the actual orientating mechanisms, and hypothetically subserving the biological survival of the species.

THE last chapter, dealing with "intersubjectivism in the world of the animal," is the most revealing of the author's phenomenological bend. The difficult question of consciousness and inner life in the animal is raised in order to deal with the problem of intersubjective relations. The argument is based mainly on the study of social encounters seen as being truly indicative of the perception of the social partner's existence. This leads the author to the reformulation of a "valorisation" hypothesis, borrowed from Levy-Schoen's work on human behavior, according to which the attribution of valence to the partner's expression would correspond to the enhancement of someone else in

the self. Even if we disregard the highly speculative character of this whole discussion, it seems rather strange in view of the author's professed intention not to present the existing data on social interaction and communication in the animal. Indeed, no mention is made anywhere in the book of the widely studied phenomena of epigamic and agonistic display by which animals enter into relationship. Yet, the recent literature on animal communication, either by means of sensori-motor display or vocal expression, would appear to be essential to a discussion of interaction between two animals or among a social group.

Whether or not the reader agrees with the author's interpretations, however, he will find the comparative analysis of such a variety of facts, relating to a wide range of species and phenomena, most interesting and instructive. The reasoning is truly original and stimulating. It must be noted also that publication of this book fills an important gap in the French literature on the subject. Up to now, French students of psychology had to rely on the 1951 translation of Tinbergen's *The Study of Instincts*. This unusual book is to be recommended to all students of animal behavior.

Cross-Cultural Crime Conference

T. C. N. Gibbens and Robert H. Ahrenfeldt (Eds.)

Cultural Factors in Delinquency.
Philadelphia: Lippincott, 1966.
Pp. xiii + 201. \$6.00.

Reviewed by ROBERT B. LEVINSON

The first editor is T. C. N. Gibbens, Reader in Forensic Psychiatry, University of London, and Consultant Psychiatrist to the Bethlem Royal and Maudsley Hospitals. The second editor, R. H. Ahrenfeldt, is Consultant and

Research Associate, World Federation for Mental Health.

The reviewer, Robert B. Levinson, is Chief, Psychology Services, U. S. Bureau of Prisons. Including six months while on an internship, he has had 5½ years' experience as a psychologist in correctional institutions. He became in 1965 the first Chief of Psychology Services. After receiving a PhD in clinical psychology from Michigan State in 1957, he managed to stay out of prisons for only two years as Chief Psychologist of a mental health clinic. He now accepts his fate, realizing that it is in a prison environment that he will do his "flat time."

IN 160-plus pages of text sandwiched between a preface by Dr. John R. Rees, Hon. President, World Federation for Mental Health, and an overview by Otto Klineberg, the editors offer an interesting pastiche. Representatives from 16 countries and 6 disciplines met in 1964 at Topeka, Kansas, to study the contribution of cultural factors make to the problem of delinquency. This book departs from the usual report of such conferences—wide-ranging styles which often approach the same target from many different directions—in that the editors have courageously made their own integration of the reports presented at the meeting.

Accepting Durkheim's view that there could be no society without crime, the editors address themselves initially, to the problem of definition of crime in different cultures. Sex crimes and crimes of violence show the largest cultural variations in definition. Difficulties in the cross-cultural comparison of crime against property—which accounts for 80 to 90 per cent of the crime in Western countries—are reflected in George Bernard Shaw's comment: if a man steals a loaf of bread he goes to prison, if he steals a railroad he may go to Parliament.

In attempting to arrive at a viable cross-cultural definition of delinquency, one must contend with the following 'crimes': in Mauritius a girl may be regarded as delinquent if she talks to strangers, but she is not officially a delinquent if she is sexually promiscuous.

Looking for a good text?

General Psychology

By David C. Edwards, Iowa State University

"Long overdue . . . a one term book such as this cannot miss. I find the book to be very well written, direct, and to the point."—James Bruning, Ohio University

This is a brief yet thorough introduction to psychology—its content, its terminology, and its methods. The author has accomplished brevity by carefully selecting the important topics, and by avoiding unnecessary or irrelevant exposition and discussion of the obvious. The approach is modern, and is concerned with psychology as a science of behavior. The text is suitable for either a brief or a standard course in general psychology in which supplementary materials are used. A workbook is available.

1968, 384 pages, \$5.95

Psychology in Action: Basic Readings

Edited by Fred McKinney, University of Missouri

Humanistic in emphasis and practical in approach, this collection is designed as a reader for the introductory psychology course. The articles demonstrate how the psychologist uses fact and methodology to deal realistically with a variety of concerns common to mankind. Contributors include Viktor E. Frankl, Harvey C. Lehman, B. F. Skinner, Arthur T. Jersild, Harry F. Harlow, P. E. Vernon, Anne Anastasi, Willard Kerr, David C. McClelland, Else Frenkel-Brunswik, Gordon W. Allport, Leonore Berkowitz, Carl G. Jung, and Ian Oswald. The editor provides a correlated listing of the topics usually offered in the introductory course with the articles presented in this collection. Pedagogical aids include an extensive bibliography, a comprehensive index, and over fifty illustrations.

1967, 564 pages, paper, \$3.95

Principles of Behavioral Analysis

By J. R. Millenson, York University, Toronto

This rigorous and systematic text is designed for use in first courses in psychology in which major concepts of functional behavioral analysis are built from the ground up. A unique feature of the book is its use of the *R* and *S* notation system as a kind of conceptualization and recording method. Elementary statistical concepts are developed within the framework of the data presented. Over 400 tables, line drawings, and diagrams are contained.

1967, 488 pages, \$7.95

Developments in Applied Psycholinguistics Research

Edited by Sheldon Rosenberg, University of Michigan, and James H. Koplin, Vanderbilt University

This collection of original articles considers the problems of language acquisition and language pathology in the context of basic research and theory. The problems of normal language acquisition and language disorders are covered. The articles reflect the transformational-linguistic approach and the learning theory approach. Problems not directly covered are discussed in the introductory chapter.

1968, approx. 304 pages, prob. \$8.95

Directions in Psycholinguistics

Edited by Sheldon Rosenberg

The original articles in this volume cover areas in the relatively new discipline of psycholinguistics: grammatical and linguistic models, mediation theory, and verbal conditioning. All are written by well-known psychologists. Serious students of language will find the innovative directions of the thinking suggestive and helpful in furthering an understanding of language processes and in identifying fruitful areas of research.

1965, 272 pages, \$7.95

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Toronto 1, Ontario

ous after age twelve; collecting cigarette butts from the street is delinquency in Cairo, so is vagrancy in India, and tree climbing in Toronto; Massachusetts has the crime of being a stubborn child. In Laos the only way a juvenile can be punished is to be thrown in prison; since few people wish to see children treated this way almost no delinquency is reported.

It has been recommended that delinquency should refer only to acts which if committed by an adult would be considered as a crime. This might bring some consistency to cross-cultural comparisons, but it leaves a number of issues unresolved. Crime rates are affected by who reports the crime and to whom it is reported; what the consequences are (political and otherwise) of a high crime rate; what new laws have been passed; how busy the courts are; whether or not there has been a recent change in the government that might affect workers in the law enforcement field, etc. Conditions such as these not only prevent meaningful cross-country comparisons, but even make suspect incidence rates of crimes reported in neighboring jurisdictions in different States in this country.

The definition problem is left unanswered and the editors move on to other topics.

While the book has the usual heavy emphasis on sociological theories of causality found in texts dealing with criminology, an attempt is made to present some psychological considerations. "Most delinquent behavior, like other social behavior, is learned" is reported as a proposition that would be strongly supported by those who took part in the conference. It is argued that this presents a starting point for the study of delinquency since "learning and unlearning processes in the treatment of offenders can at least be subjected to controlled experiment." This leads to a discussion of recent innovative and experimental projects in the delinquency-treatment field.

The second part of the book consists of a rundown of the status of crime in some 18 countries around the world; it ends with a plea for more research.

In capsule, recent archeological findings have revealed that the behavior of early animals underwent an evolutionary process—from random wanderings, to more orderly "meandering," to a concentrated "spiraling down"—as these early life-forms sought more efficient ways to find nutriment. The present book represents some of the meanderings current in the criminology field—would that we could soon begin to spiral in on some of the critical target issues.

With Careful Detail

Naomi D. Rothwell and Joan M. Doniger. Foreword by Robert A. Cohen, MD

The Psychiatric Halfway House: A Case Study. Springfield, Ill.: Thomas, 1966. Pp. xvi + 265. \$8.75.

Reviewed by NATHANIEL N. WAGNER

The authors are described by the reviewer, Nathaniel N. Wagner, who is Associate Professor and Chief Psychologist, Department of Psychiatry at the University of Washington. At present, however, Wagner is a Visiting Fulbright Professor at the University of Malaya, where he is Acting Head of the Department of Psychological Medicine in the new Faculty of Medicine. His PhD is from Columbia University and he has had long experience in Army hospitals as Chief Psychologist. He has also taught at the University of Georgia, The Pennsylvania State University, Dutchess Community College, and Bard College.

THE CURRENT IDEOLOGY of the mental health movement places great emphasis on the decentralization of psychiatric services, the involvement of the 'community' in the treatment and prevention of emotional disturbances, and the participation of all members of the mental health 'team' in responsible and effective interaction with

the individuals they serve. Despite the recency of some of these concepts there are abundant writings describing the principles and theories of the new community mental health. What has been woefully lacking are reports of specific programs which carefully describe the kind of activities necessary to implement the oft repeated principles of community mental health. Exactly what are the services to be offered? Who are the 'lesser' or 'sub' or 'pre' professional personnel who will provide the direct services to those in need of assistance? What kind of consultation with professionals? How often? By whom? For what? *The Psychiatric Halfway House* is an excellent description of the extensive planning and followthrough necessary to implement a single new mental health program. It answers all these questions as they pertain to one program started by two dedicated people in the city of Washington, D. C.

The beginnings of the psychiatric halfway house probably can be traced to the Belgian town of Leuven where for several centuries people who were disturbed to live alone or with their families were given shelter in the homes of the townspeople. The idea took firm root in the United States during the mid-1950's as the closed-door institutional care of the mental hospital came under increasing criticism. Although it is difficult to develop a clear criterion for halfway houses, there are now approximately 60 centers for people who need a residential institution that provides services particularly suited to the ex-mental patient or the individual who might need hospitalization if a halfway house did not exist.

THIS BOOK describes in explicit detail the development of a halfway house from the first glimmer in the mind of its originator through the writing of a prospectus, the incorporation of the house with a Board of Trustees, the purchase of property, the admission of its first resident, and the successes and failures of seven years' experience. It is written with a candor that is refreshing and joyful. No detail is considered too small to be rendered faithfully.

TO CHALLENGE THE PSYCHOLOGY STUDENT . . .



PSYCHOLOGY:

An Introduction to a Behavioral Science
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By HENRY CLAY LINDGREN, *San Francisco State College*; DONN BYRNE, *University of Texas*; and LEWIS PETRINOVICH, *State University of New York, Stony Brook*. This well-known text captures the imagination of the beginning student. Semantic differential, cognitive dissonance, authoritarian attitudes, self-theory, behavior theory, GRIT, achievement motivation, and social learning are dealt with. The psychology of international relations, creativity, the use of computers in psychological statistics, and other timely topics are also featured. A workbook of tested classroom projects, and an instructor's test manual are also available.

1966 560 pages \$8.50

FOUNDATIONS OF SOCIAL PSYCHOLOGY

By EDWARD E. JONES, *Duke University*; and HAROLD B. GERARD, *University of California, Riverside*. "Beautiful, just beautiful. The best book of its kind in the field."—Elliot Aronson, *Professor and Director of the Social Psychology Program, University of Texas*.

1967 743 pages \$8.95

THEORIES OF CHILD DEVELOPMENT

By ALFRED L. BALDWIN, *New York University*.

1967 618 pages \$8.95

CHILD PSYCHOLOGY:

Behavior and Development

By RONALD C. JOHNSON, *University of Colorado*; and GENE R. MEDINNUS, *San Jose State College*.

1965 556 pages \$8.95

PSYCHOLOGY OF THE CHILD

Second Edition

By ROBERT I. WATSON, *Northwestern University*.

1965 635 pages \$8.95

PERSONALITY AND ASSESSMENT

By WALTER MISCHEL, *Stanford University*. A review of various theoretical concepts and assumptions regarding personality. Concepts and findings are integrated from basic personality research, personality assessment, and personality change. Reviews of research on consistency or specificity, on the temporal stability, and on the external correlates of major personality dimensions are included. Cognitive processes and constructions of the personality are explored. Personality constructs and tests are evaluated through a detailed survey of their incremental validity.

1968 365 pages \$8.50

REVIEWS OF RESEARCH IN BEHAVIOR PATHOLOGY

Edited by DAVID S. HOLMES, *University of Texas*. A collection reviewing major works of empirical research in behavior pathology. Individual projects are presented, as well as critical comments on the methodology used. The articles are by: William Scott; Edward Zigler; Leslie Phillips; Ronald S. Wilson; Jack Sandler; Edith H. Freeman; Ben J. Feingold; Kurt Schlesinger; Frank J. Gorman; Barbara Tizard; Leon J. Yarrow; Herman A. Witkin; Elliot G. Mishler; Norman A. Scotch; George H. Frank; William Herron; Arnold H. Buss; Peter J. Lang; Richard Lynn; Seymore S. Kety; Albert Bandura; and M. P. Feldman.

1968 In Press

PSYCHOPATHOLOGY

By ARNOLD H. BUSS, *Rutgers, The State University*.

1966 483 pages \$8.95

PERSONALITY, An Objective Approach

By IRWIN G. SARASON, *University of Washington*.

1966 670 pages \$8.95

BEHAVIORAL SCIENCE FRONTIERS IN EDUCATION

Edited by ELI M. BOWER, *National Institute of Mental Health, Bethesda, Maryland*; and WILLIAM G. HOLLISTER, *University of North Carolina School of Medicine, Chapel Hill, N. C.*

1967 539 pages \$8.95

JOHN WILEY & SONS, Inc.

605 Third Avenue

New York, N.Y. 10016

Those who have been involved in the administrative labor of implementing impressive sounding programs can appreciate the need to discuss every aspect of finance including, for example, the methods of purchasing food and the problem of who collects the monies from the resident and what is done when he can't pay.

This profusion of detail does not mean that the book is a dry, detailed chronology of administrative and psychiatric decisions. On the contrary, the people who have inhabited the house are presented in a manner free of jargon that allows for a realistic appraisal of the complexities of decision making. In the case histories of two of the residents, however, the detail becomes wearisome and the professional reader becomes bored with the minute accounts of the residents' activities.

The over-elaboration in the chapter where the "stories" of two residents are presented may reflect the unwillingness of the authors to assume roles they do not feel are appropriately theirs. Mrs. Rothwell is a study director and writer for the Bureau of the Census and is the sister of Joan Doniger, one of the founders of Woodley House. Both Miss Doniger and her co-founder, Edith Maeda, are occupational therapists who worked with Fritz Redl in the experimental section he developed at the National Institute of Mental Health for the study and treatment of aggressive, anti-social children. In addition Miss Doniger was in the 1940's a counselor at the Orthogenic School directed by Bruno Bettelheim at the University of Chicago.

Obviously the founders of Woodley House are unusual people in their training and experience. This is clearly reflected in their thoughtful rejection of the therapist's role for the more therapeutic one of dealing with reality-oriented issues in a clear and consistent manner. Here the need for consultation with professionals not involved in the day-to-day operation of the House is clearly discussed. There is a full discussion of the nature of the relationship with the therapist of each resident—no resident is accepted unless he has a regular therapist. In contact with families, in the establishment of different

fees for working and non-working residents, and in depth of understanding, a consistent and ego supporting milieu is developed and maintained.

This book should be read by all those who profess an interest in community mental health. The Woodley House model cannot be adapted easily to other centers and it may be inappropriate to do so. In care and attention to detail that must be part of the planning of any new mental health project, however, Woodley House provides an excellent guide for the developers, consultants, and administrators of future programs in the new community mental health model.

Psychology for the Classroom Unobfuscated

E. Stones

An Introduction to Educational Psychology. London: Methuen, 1966. (Barnes & Noble, New York, US distributor) Pp. 424. \$3.50, paper; \$6.50, cloth.

Reviewed by MAURICE E. TROYER

The author, Edgar Stones, was educated at the Universities of Sheffield and Manchester, and taught in several kinds of schools and colleges in England. He is at present lecturer in education (psychology) at the University of Birmingham. A recent book is Learning and Teaching: A Programmed Primer for Students of Education.

The reviewer, Maurice E. Troyer, received his PhD with S. L. Pressey some three decades back when they published the Laboratory Workbook in Educational Psychology. He is co-author of Functional Program in Teacher Education and Evaluation in Teacher Education, both published by the American Council. After 15 years in Japan as

Vice-President of the International Christian University and earned to Syracuse University a Ph.D. as Professor of Higher Education. He is currently writing, under a Rockefeller grant, a report of a longitudinal study of the value consequences of our education.

STONES seems to realize that the knowledge explosion and rapid change will make opportunities and responsibilities of teaching and learning increasingly complex. He centers this book around his own experience but stressed with generous reference to a carefully selected international bibliography of only 48 items. The bibliography is briefly annotated. It is to be commended for resistance to temptation to clutter the book with extensive references to intrinsically worthy and careful research that might obfuscate teaching and learning for elementary and secondary students. It is a linguist may know much about languages of interest to linguists that would confuse rather than enhance teaching and learning the language, so it may be with educational psychologists.

Compared with other textbooks there are few tables, charts, diagrams, footnotes, and no pictures. But the book is interesting, relevant, analytical, well organized and quite up-to-date throughout. "What this Book is About" replaces the usual preface. The goal is to "relate findings of research to classroom practice. . . not to provide ready made techniques." Its focus is on "development of general principles and concrete examples of good teaching"—more of the former.

THE OUTLINE flows through physical development (very brief, mainly neural); the nature of maturation through experience; introduction to learning (theory)—conditional reflex to Gestalt; mechanisms of learning; learning and language; learning and concept formation; language and thought; learning in school; programmed instruction; evaluation of achievement; intelligence and testing; backward children and their treatment; the social psychology of the school and the teacher's task.

THE COUNSELING OF COLLEGE STUDENTS

Function, Practice, and Technique

Edited by Max Siegel, *Brooklyn College*

Foreword by Harry D. Gideonse

The Counseling of College Students covers all the significant aspects of student counseling, focusing on function, practice, and technique with a depth of coverage not found in any other book on the subject.

1968 487 pages \$9.95

CONTENTS AND CONTRIBUTORS:

Contributors. Foreword. Preface. Introduction. Part I: Background—The History of College Counseling (Richard Fitzpatrick). The Personality of the College Student (Irene Impellizzeri). Part II: Tools—The Counseling Interview (Richard E. Gruen). Psy-

chological Testing and the College Counselor (Max Weiner). Group Techniques in Education, Counseling, and Psychotherapy (Max Siegel). Part III: Function and Practice: General—The College Admissions Process (Irving Krongelb). General, Academic, and Pre-Professional Counseling (Myron E. Berrick). Student Activities Programs (Archie MacGregor). Placement Counseling (Roberta Baker). Part IV: Function and Practice: Specialized—Vocational and Career Counseling (Richard E. Gruen). College Mental Health (Samuel Pearlman). Counseling the Physically Handicapped (Norman Kiell). Health Services Counseling (Ruth R. Frankel). Religious Counseling (John J. O'Sullivan). Disciplinary Counseling (Ernst Koch). Reading and Other Academic Improvement Services (Phillip B. Shaw). Part V: *Serving the Student*—The Teacher and the Counselor (Murray M. Horowitz). Society and Values: Students and Citizens (Herbert Stroup). Student Services: Administration and Structure (Max Siegel). Appendices. Name Index. Subject Index.

INFANCY AND EARLY CHILDHOOD

A Handbook and Guide to Human Development

Edited by Yvonne Brackbill,
University of Denver

Representing the work of thirteen distinguished authorities, this volume thoroughly examines the basic areas of human development during the first years of life. Among the topics discussed are particular processes of infant acculturation; sensory function and its development, the attainment of concepts, and language acquisition.

1967 532 pages \$9.95

BEHAVIOR IN INFANCY AND EARLY CHILDHOOD

A Book of Readings

Edited by Yvonne Brackbill,
University of Denver, and
George G. Thompson, *Ohio State University*

With selections from leading investigators in the field, this comprehensive reader examines the major dimensions of development during infancy and early childhood. Selections range from established classics to the first English translations of pioneering Russian studies and are organized to encourage comparative examination.

1967 712 pages \$9.95

THE STUDY OF POLICY FORMATION

Edited by Raymond A. Bauer,
Harvard University, and
Kenneth J. Gergen, *Swarthmore College*

The editors have made a major contribution to the study of a complex social and psychological process by bringing together nine empirically oriented, previously unpublished papers. The book offers a skillful synthesis of past approaches and a ready reference to contemporary techniques of study.

May, 1968 approx. 400 pages \$9.95 tent.

CURANDERISMO

Mexican-American Folk Psychiatry

By Ari Kiev, M.D.,
Cornell University Medical College

Curanderismo focuses on the impact of cultural factors on the form and content of theories and treatment in Mexican-American folk psychiatry. It examines not only how culture contributes to personality formation and psychic conflict, but also to the development, patterning, perpetuation, and management of psychiatric illness.

April, 1968 222 pages \$7.95

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Comparative emphases are indicated by analysis of a fifteen-page index. Backwardness gets a quarter page of references; classroom .25 page; concept attainment, formation and conceptual thinking almost a full page, development .25 page, equilibrium and homeostasis .25 page; intelligence, I.Q. and testing .6 page; language and linguistic ability almost a full page; learning a full page; transfer .3 page; problem solving .25 page; programmed learning .6 page; reading .2 page; reinforcement .25 page; tests .25 page, and thought .25 page.

Although learning theory is built up from the conditioned to conceptual and problem solving, the ultimate pragmatic goal is *learning to learn*—helping the learner to conceptualize and generalize structure of content and structure of learning. There is more emphasis on meaning and transfer than has appeared in educational psychology texts for some years.

Understandably the author seemed to have some difficulty reconciling the imposed structure of Skinnerian lineal programmed learning with the goal of learning how to learn. Crowder's intrinsic technique of programming seems to provide more opportunity for the learner to conceptualize structure. Near the end of the book the author seems to be on the side of helping the student generalize out of meaningful experience. He recognizes that much time can be "wasted" in this process. But he almost overlooks the probability that generalization out of one's meaningful experience requires less time "wasted" in reinforcement.

Perhaps the reviewer will be permitted a few personal observations. I wish psychologists would first clarify the semantic problem in analyzing *intelligence* before analysis of the theoretical problems. At least then we would know what the conflicts between theories are. Another is *feedback*. Has anyone ever stopped to ask whether or not there is any such thing as feedback? In time? In space? Or is it possible that it is all feed forward, i.e., "the solving of the problem is itself a higher order principle because it subsumes the principles which the child already knows when it tackles the problem" (p. 374).

How would you feed back a scraggy cow, runt pig, or puny child? Perhaps it's too late to raise the issue. It may be enough to know that feedback may really mean feed forward even in the programmer, the program, and the computer.

Stones outlined what he was going to do. He followed the the outline, summarized each chapter and summarized

the whole in the last chapter—the teacher task. The volume is excellent in its relevance to school learning. Interpretation of research is succinct and well applied, but the book will not help students to analyze research for themselves. In general, however, it deserves the strongest commendation as a textbook for undergraduate students and as a reference for in-service

Assorted Experimental Social Psychology

Leonard Berkowitz (Ed.)

Advances in Experimental Social Psychology. Vol. 2. New York: Academic Press, 1965. Pp. xi + 348. \$9.50.

Reviewed by HAROLD B. GERARD

The editor, Leonard Berkowitz, received his PhD from the University of Michigan in 1951, was research psychologist at the Crew Research Laboratory, HRRC, and since 1955 has been at the University of Wisconsin where he is now Professor of Psychology except for one year (1966–67) when he was Professor of Psychology at Cornell University.

The reviewer, Harold B. Gerard, also received his PhD from the University of Michigan, has taught at NYU, the University of Buffalo, spent the year 1954–55 as research scholar at the US Education Foundation, was on the staff of the Bell Telephone Laboratories (1955–62), and since 1962 has been Professor of Psychology at the University of California, Riverside. He spent 1963–64 as a Fellow at the Center for Advanced Study in the Behavioral Sciences.

BERKOWITZ has done it again. The second volume of *Advances* is on a par with the first one in the excellence of its contributions. As pointed out by

Darley in his review of Volume 1 (*Contemporary Psychology*, October, 1965), the format of the Berkowitz volumes is unique. The articles are long enough and the strictures on style loose enough to give the author some freedom to take a number of steps backward into previous research and forward in order to speculate beyond the current data, thereby giving the reader some real perspective on a problem. This type of communication is not possible in journal articles.

The volume deals with virtually all of the active areas of experimental social psychology. There are papers on social perception, social influence, decision-making, attitudes, social structure and social exchange. Furthermore, there is not a single chapter that does not have something new and interesting to say.

I was particularly pleased to see a chapter by Bandura which summarizes his work and the work of others on vicarious learning. Bandura reviews that work bringing to it a fresh approach that relies heavily on cognitive mediation of vicariously learned modeling re-



Principles and Methods of Social Psychology

By EDWIN P. HOLLANDER, *State University of New York at Buffalo*. "A solid, up-to-date, broad gauged and well-written book which fills a vacuum in the current books available."—Hadley Cantril, *Institute for International Social Research*, Princeton

1967 544 pp. 77 figures; 10 tables \$8.00

Current Perspectives in Social Psychology:

READINGS WITH COMMENTARY

SECOND EDITION

Edited by EDWIN P. HOLLANDER and RAYMOND G. HUNT, *State University of New York at Buffalo*. "A very impressive library of papers which makes the student acquainted at relatively low cost with the best current thinking in all the recognized areas of social psychology."—H. L. Ansbacher, *University of Vermont*

1967 697 pp. illus. paper \$5.00

An instructor's manual, to be used with Hollander: *Principles and Methods of Social Psychology*, and the Second Edition of Hollander and Hunt: *Current Perspectives in Social Psychology*, is available.

Human Learning and Memory:

SELECTED READINGS

Edited by NORMAN J. SLAMECKA, *State University of New York at Buffalo*. "This is the best collection so far assembled because it has the highest proportion of those 'classical' papers that every serious student should know."—Arthur W. Melton, *University of Michigan*

1967 555 pp. illus. paper \$5.75

The Biochemistry of Memory:

WITH AN INQUIRY INTO THE FUNCTION OF THE BRAIN MUCOIDS

By SAMUEL BOGOCH, M.D., *Boston University School of Medicine*. Based on the author's extensive research in the field, and a review of current work on the molecular basis of memory, the book describes studies dealing with the mucoids of the brain, their structure, metabolism, pharmacology, immunology, development, and state in learning situations.

May 1968 280 pp. 44 illus.; 21 tables \$7.50

Disordered Behavior:

BASIC CONCEPTS IN CLINICAL PSYCHIATRY

By ERIC PFEIFFER, M.D., *Duke University Medical Center*. This introduction to clinical psychiatry gives balanced coverage of the major themes and clinical syndromes in psychiatry. Topics discussed include: affective disorders; schizophrenia; organic brain disease; alcoholism and the addictions; psychotherapy; the healthy personality; and the psychiatric interview.

Spring 1968 224 pp. cloth \$5.75 paper \$4.00

Leaders, Groups, and Influence

By EDWIN P. HOLLANDER. This volume offers a distinctive collection of twenty theoretical and research papers designed to provide a consistent view of leadership as an influence process. The studies assembled here represent a decade of the author's work on leadership and the related phenomena of conformity, group behavior, morale, and person perception.

1964 270 pp. \$5.00

Perspectives in Psychopathology:

READINGS IN ABNORMAL PSYCHOLOGY

Edited by JAMES O. PALMER and MICHAEL J. GOLDSTEIN, *both of the University of California, Los Angeles*

1966 448 pp. 44 illus. paper \$4.00

Contributions to Modern Psychology:

SELECTED READINGS IN GENERAL PSYCHOLOGY

SECOND EDITION

Edited by DON E. DULANY, JR., *University of Illinois*, RUSSELL L. DEVALOIS, *Indiana University*, DAVID C. BEARDSLEE, *Oakland University*, and MARIAN R. WINTERBOTTOM, *The Judge Baker Guidance Center*

1963 484 pp. illus. paper \$3.50

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sponses. It is his contention that the previous approaches to the study of imitation have relied primarily upon the reinforcing stimulus control of matching responses. He suggests that much significant modeling behavior occurs long after the model was originally observed and under conditions in which the person doing the observing has no particular incentive to learn the response. The theory Bandura presents relies upon a residue of symbolic representation of observational experiences. This process is described in associative learning terms. The studies reviewed indicate that the acquisition of modeled behavior is affected by both the learner-model social relationship and the reinforcement contingencies observed in the model's behavior.

THE DATA from studies on selective exposure to information about decision alternatives have been a problem for workers in the dissonance tradition. The derivation from the theory is straightforward. After a decision that cannot easily be reversed the person should avoid information that is inconsistent with the decision and should seek out information consistent with it; to do otherwise would arouse dissonance and thereby tend to make the person want to undo his decision. Freedman and Sears present a thorough review of the research relevant to this derivation. They conclude that the picture is mixed. Seeking out positive information about the chosen alternative or negative information about the nonchosen alternative would tend to produce consonance, whereas seeking out negative information about the chosen alternative and positive information about the nonchosen one would produce dissonance. Five studies present data in line with the hypothesis, five present data opposite to the hypothesis, and seven yield data showing no preference whatsoever. The theory further specifies that selectivity favoring supportive information should be greater the greater the dissonance—for example, the more important are its consequences. Again the picture is discouraging, with no clear support either for or against the hypothesis. The paper convincingly demonstrates the need for

reassessing the theory and the experimental methodology.

Hoffman presents a comprehensive but overly brief summary of the literature on group problem-solving that focuses on the period from 1950 until the present. He first discusses the factors that appear to inhibit effective group problem-solving, such as a decline in individual initiative, and then he considers factors such as good leadership that promote effective problem-solving. Hoffman raises an interesting point at the end of the paper when he argues that the nature of the problem being solved has been given scant attention. Dot counting and managerial tasks tend to be lumped together, and studies dealing with various kinds of problems are discussed in the same breath.

An up-to-date review of the conformity literature is presented in a chapter by Vernon Allen. He discusses various theoretical approaches to conformity behavior and then he focuses on the circumstances under which public compliance and private acceptance of the group norm are likely to occur. He discusses the various experimental techniques that have been used to study conformity and he examines the appropriateness of these techniques for exploring different kinds of problems. He surveys the wide variety of situational factors that tend to affect conformity.

Schopler presents a useful review of the research done on social power. His paper is of special interest for having gone well outside the field of psychology in describing the decision-making framework, which has derived largely from the work of political scientists. He contrasts this with the field theoretical approach and an approach based upon contingencies of social interaction. I was glad to see Schopler underscore my own uneasiness about the lack of consensus in the way the concept of power has been employed by various workers. The research to date is rather flimsy. This is particularly paradoxical when we consider how much has been written through the centuries about the nature of the power relationship.

How do we attribute dispositions to others? This is the question Jones and Davis attempt to answer. They argue that dispositions are inferred by the person from the others' acts. This is done not in any absolute way but in terms of the various alternatives the other could have employed in the situation. Thus, if there are certain constraints in the situation which force a person to act the way he does we learn little about him—what he violates those constraints his behavior provides useful data for inferring what he is like. This conception derives from earlier suggestions of Heider. The paper is primarily a theoretical one in which Jones and Davis attempt to formulate the problem. They present some supporting evidence but unfortunately too little research bears convincingly reasonable and elegant simple approach to a fundamental question in social psychology.

IN his contribution, Adams laments the fact that although other social scientists have been deeply concerned with the distribution of reward in social exchange, social psychologists, with a few notable exceptions, have ignored the problem. Adams takes as his problem the psychological effects of an unjust distribution of reward. He considers the work on relative deprivation, distributive justice, and inequity, his own work being in the last mentioned area, the one upon which his paper focuses. His general conclusion is that when a person receives too much or too little in the way of reward for his behavior, he attempts to accommodate to the inequity. He can do this in a variety of ways, such as distorting the value of the reward to make it commensurate with the effort he expended or by subsequently increasing or decreasing the amount of effort expended on a similar task.

The final paper of the volume is by Berkowitz himself on a problem, aggression, that has been his "bag" for a good many years. He presents a balanced view of the underlying basis for aggressive behavior, taking a middle path between those who would put the burden of explanation strictly on the biological

A PHILOSOPHY OF SCIENCE FOR PERSONALITY THEORY

Joseph F. Rychlak

This book provides a framework within which the longstanding problems of psychology can be better understood. Part 1 reviews the background issues which have led to controversy and discusses the nature of theory and method in science. In Part 2 the basic conflict between the "computerized" or mechanistic conception of man and the "humanistic" or dynamic one is shown to have grown out of the historical bifurcation between dialectical and demonstrative reasoning. These two strains of thought are traced from their early Greek origins to their contemporary counterparts. Dr. Rychlak argues that psychologists must learn to consider both points of view in reasoning about man, or run the risk of being incorrect in their conceptualizations or unscientific in their methods of study.

508 pages / 1968 / \$7.95

ENCOUNTER WITH REALITY

New Forms for an Old Quest

Gardner Murphy and Herbert E. Spohn

This is a fresh attempt to answer the ancient question, "Can man know reality?" The authors explore the relevant findings of experimental, clinical, and developmental psychology, and suggest that an investigation of the processes of knowing shows that there are limits to what we can claim really to know. Part 1 is concerned with the barriers in the way of objectivity imposed by the biological, personal, and cultural roots of human modes of knowing. In Part 2 the authors turn to the positive directions established in the search for reality and attempt an interpretation of what can actually be known about the environment and about man.

About 150 pages / A May 1968 Publication

PERSONALITY DEVELOPMENT AND PSYCHOPATHOLOGY

A Dynamic Approach

Norman Cameron

This integrated, systematic study of normal and abnormal personality development from childhood to old age stresses the relationships between personality development and psychopathology. The book begins with six chapters on normal development, centers on disorders and reactions, and concludes with a chapter on therapy.

791 pages / 1963 / \$9.75

SOURCEBOOK IN ABNORMAL PSYCHOLOGY

Leslie Y. Rabkin and John E. Carr

A collection of readings designed to give the student an understanding of psychopathology, this sourcebook focuses on the dynamic elements and family aspects of disturbed behavior. Drawn from both recent research and classic papers in the field, the selections examine such basic questions as, "What is the nature of the interpersonal field of the disturbed person, what is the inner experience of the disordered individual, and out of what kind of family matrix does disturbance arise?" The selections are organized around psychiatric syndromes; prefacing each section is a brief introduction to the subject covered and a resume of the articles which follow.

528 pages / 1967 / Paper / \$4.95

Houghton Mifflin

Boston / Atlanta / Dallas / Geneva, Ill / New York / Palo Alto

side and those who would attribute aggressive behavior completely to learning. His own point of view involves a recasting of the frustration-aggression hypothesis. His formulation is that frustration need not always produce aggression and aggression need not always be preceded by frustration. He then discusses research from three of his recent experiments in which the arousal value of cues was varied.

This volume is a must for any serious student of social psychology. The papers are excellent and most of them are highly readable. The styles and format of the articles are sufficiently different to make reading the book a very pleasant and varied experience.

Learning to Drink

George L. Maddox and Bevo C. McCall

Drinking Among Teen-agers: A Sociological Interpretation of Alcohol Use by High-School Students. (Monograph No. 4, Rutgers Center of Alcohol Studies) New Brunswick, N. J.: Rutgers Center of Alcohol Studies, 1964. Pp. xvi + 127. \$6.00.

Reviewed by R. M. Liebert

The first of the two authors, George L. Maddox, is Professor of Sociology and Medical Sociology, Duke University. His PhD is from Michigan State University and he recently completed a two-year term as chairman of a special Committee on Drinking Behavior, Society for the Study of Social Problems. Bevo C. McCall, the second author, received his PhD from the University of Chicago, 1954. He is currently Lecturer at the New Experimental College, Skjumb pr. Hordom, Thy, Denmark. He is author with P. E. Siegle of *The Individual in American Society*.

The reviewer, Robert M. Liebert, is Assistant Professor of Psychology,

Vanderbilt University. He received his PhD in 1966 from Stanford University and his major research interest is imitation. He has several published articles and a book in preparation. His current interest is in the development of "self-control" or "rule-regulated" behavior in children through observational learning (imitation).

WHEN an activity is a notable prelude or adjunct to maladaptive behavior, researchers and laymen alike may succumb to the temptation of focusing on that activity solely in terms of "pathology" and "cure." It is thus refreshing to find the consumption of beverage alcohol among teenagers, frequently viewed from a "problem" orientation, examined vis-à-vis its social and economic correlates in Maddox and McCall's *Drinking Among Teen-agers*. The volume, one of a series from the Rutgers Center for Alcohol Studies, reports questionnaire data collected from nearly 2,000 eleventh- and twelfth-grade students, supplemented by one-hour interviews with 55 of these subjects. Each teenager responded to 40 general questions (ranging from age, sex, and family income to concern about the judgments of peers) and to 38 questions relating to the use and evaluation of alcohol by him, his peers, and adults.

Analysis of the questionnaires, presented descriptively as percentages in 25 tables, is uniformly guided by the authors' tripartite division of respondents as "drinkers" (those who so label themselves), "non-drinkers" (those who eschew the "drinker" label, but nonetheless report a recurrent use of alcohol), and "non-users" (those who indicate no recurrent use of alcohol). The value of this distinction receives regular corroboration in the analyses reported. For example, "drinkers" were found to differ from "non-drinkers" in that they reported a higher consumption of alcohol, tended to be older, and were more likely than "non-drinkers" to state that drinking is an appropriate activity for persons of their age and sex.

THE main burden which faces both the reader and the authors is to sys-

tematize and interpret an overwhelming mass of percentage comparisons. In regard the volume's success is modest. Specifically, the organizing proposition which introduces the research findings is that "young people do not invent the idea that they should drink (or abstain); they learn it." Even after overcoming one's temptation to regard the proposition as something less than astonishing, one may still question its integrative power over some of the specific interpretations offered. From the interview material, for example, it appears that teenagers often use alcoholic beverages on such milestone occasions as the induction of a comrade into the armed services. Commenting on such reports the authors suggest "drinking as it is described here appears to be an improvised rite of passage between adolescence and adulthood"—an interesting interpretation but one which seems indifferent to the primary proposition, if not at odds with it. The analysis of results is also weakened by an absence of statistical sophistication. Thus, small percentage differences such as the finding that 70 per cent of the middle-class boys and (only?) 66 per cent of the lower-class boys (with "class" based on occupational classification of their fathers) report themselves to be "non-users" seems to cry for inferential statistics before interpretation. Additionally, to the extent that a consistent thread is assumed to exist among several of the categories used (e.g., social class, age, and religious involvement), the failure to relate drinking to a conjunction of these factors seems unfortunate.

Despite its shortcomings, those interested in descriptive information on the drinking practices and views of young people in America should find this volume a valuable reference source and, while not fully satisfying in its attempt to integrate the information gathered, the volume may stimulate others to provide more systematic interpretation.



Psychology Today from McGraw-Hill

PSYCHOLOGY: The Experimental Approach. By DOUGLAS CANDLAND.
Delta Regional Primate Center, Louisiana

Most suitable for upper-class, one- or two-semester courses stressing content, this text covers the physiological processes which underlie behavior, the role of the sensory system in determining behavior, and those aspects of animal behavior which relate to human experience. **736 pp., \$9.95**

PSYCHOLOGICAL EXPERIMENTS AND DEMONSTRATIONS. By LOUIS SNELLGROVE, Union University, Jackson, Tennessee. This book can be used as a lab manual or supplementary text for various courses. Provides procedures for designing and performing experiments—individually or by the class—and statistics for evaluating the results. **160 pp., \$3.50**

READINGS IN THE PSYCHOLOGY OF ADJUSTMENT, Second Edition. Edited by LEON GORLOW, Pennsylvania State University and WALTER KATKOVSKY, Fordham University. This book introduces the reader to the main currents of thought in the psychology of adjustment. As a supplementary text it provides valuable material for discussion. It may also be used as a basic text. There are original introductions to each section written by the editors. **Winter**

CLASSICAL PSYCHOPHYSICS AND SCALING. By SIDNEY A. MANNING, University of Maryland and EDWARD ROSENSTOCK, Pennsylvania State University. This semi-programmed text is designed to teach the fundamentals of classical psychophysics and scaling as part of a general introductory course, or as an adjunct to courses in Perception, Experimental or Physiological Psychology. **176 pp., \$2.50 (soft-cover), \$4.95 (cloth)**

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CHALLENGES OF HUMANISTIC PSYCHOLOGY. Edited by J. F. T. BUGENTAL, Psychological Service Associates. Thirty-seven distinguished contributors such as Carl R. Rogers, Hadley Cantril, Adah B. Maurer, etc., discuss the methodology, research findings, new areas of research, and substantive products of the humanistic approach. **384 pp., \$4.95 (soft-cover), \$6.95 (cloth)**

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Available Winter

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The Psychobiography Trap

Meyer A. Zeligs

Friendship and Fratricide: An Analysis of Whittaker Chambers and Alger Hiss. New York: Viking Press, 1967. Pp. xiv + 476. \$8.95.

Reviewed by R. IAN STORY

The author, Meyer A. Zeligs, is a graduate of the University of Cincinnati (BA and MD); graduate and member of and, since 1958, instructor in the San Francisco Psychoanalytic Society. He is in private psychoanalytic practice in San Francisco at present. He has been much interested in the psychology of silence and has also written on the subject of "acting in."

The reviewer, R. Ian Story, is a psychotherapist and diagnostician with a particular and developing interest in the individual person. This has been translated at Riggs, a setting rich in Erikson's thinking, into an interest in the human life cycle, into "normal" development, and into psychobiography and psychohistorical methods. His predoctoral training was at the University of Toronto and at the University of Michigan (PhD 1963). One postdoctoral year was spent at the Austen Riggs Center where his core clinical interests were stimulated and directed by such extraordinary clinicians as Dr. Robert A. Harris, Dr. Margaret Brenman and the late Dr. Robert P. Knight. He has remained at Riggs as a permanent staff member since 1964.

THE FASCINATING ENTERPRISE of psychoanalytic biography is still in relative infancy and it is probably neither wise nor fair to bring utopian critical standards to bear in assessing its fruits to date. It does not seem rash, however, to say that psychobiography has been thwarted in 1967 by the publication of two keenly disappointing books about three conspicuous

men, Woodrow Wilson, Whittaker Chambers, and Alger Hiss. First has been the alarmingly bad account of Wilson by William Bullitt and Sigmund Freud from which the psychoanalytic circle has tried to dissociate both itself and Freud. Second, though not as deplorable, is the new study of Chambers and Hiss by Meyer Zeligs in a book that could have been enormously stimulating and a service to several causes, but is instead largely a failure—and of a kind that is hard to excuse.

Zeligs spent six years in the research and writing of his very long account—such projects are always exceptionally ambitious. The facts of the case can be distilled into approximately the following: Whittaker Chambers accused Alger Hiss and several other men of Communist party membership during the 1930's at a 1948 appearance before the House Committee on Un-American Activities. Only Alger Hiss chose to deny Chambers's charges, leading to an acutely emotional confrontation of the two men, then to a libel suit against Chambers which back-fired by virtue of a sudden contradiction that injected espionage activity into the picture. There followed the well-known perjury indictment against Hiss and his eventual conviction. The main body of Zeligs's new material concerns the respective early lives of Chambers and Hiss. Zeligs's psychoanalytic interpretations of their backgrounds and the bizarre dyad of their relationship leads him to conclude that the answer to the Hiss-Chambers riddle lies primarily in an unconscious conspiracy by the psycho-

pathic Chambers to destroy Hiss and save himself by a recapitulation and mastery of early conflicts involving Chambers's lifelong denial of the wished/feared death of his own brother who had committed suicide. Chambers was driven "to destroy those he loves," according to Zeligs; in the fratricidal "double death pact" situation provided by Hiss, his private confession of guilt protected him "against his own destruction" but thereby converted "his confession into an accusation" that took the form of symbolically killing Hiss. As for Hiss's own contribution to this tragedy, Zeligs suggests in a more tentative vein that his father-deprived, brother-worshipping background determined a later and somewhat indistinct need for contact with father substitutes. The implication is clear, however, that Hiss was largely victimized by the impostor Chambers, and Zeligs's intermittent hints at a possible conspiratorial role by the F.B.I. underline his over-all conception of Hiss's innocence and Chambers's villainy.

UNHAPPILY, this kind of summary statement does not seriously misrepresent the scope or intellectual impact of *Friendship and Fratricide*. To be sure, the book is almost dense with important new information, references, anecdotes, documents, rejoinders, illustrations, and the like. Moreover, it performs the very useful function of collecting and organizing a great deal of previously published material about the case much more successfully than any other book on this subject. But it also lacks the depth, sophistication, and scale that this subject demands. Zeligs's explanatory framework is narrow and reductionistic in a way that strikes the reviewer as a glaring misapplication of psychoanalysis. For example, his fixed naiveté about the changing historical-political contexts in which the Hiss-Chambers friendship grew and came to trial, his inability to recapture an era, permits Zeligs to make the bald assertion that "Chambers's life" is to be viewed "as one prolonged span of psychic conflict," that "his earliest years predetermined his future thoughts and actions" and that we learn nothing

EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT

David A. Payne and Robert F. McMorris

For courses focusing on tests and measurements, this text contains fifty-four theoretical and research papers providing a broad perspective on test development with an emphasis on the assessment and prediction of learning outcomes. A manual of examination questions is available.

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1968 209 pages Paper \$2.75

STUDIES IN EDUCATIONAL PSYCHOLOGY

Raymond G. Kuhlen

For courses focusing on the psychology of school learning, this text contains fifty papers dealing with the learning process with special attention to the cognitive, personality, and motivational factors involved.

1968 482 pages Paper \$5.75

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Fall 1968



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"by blaming (sic) Communism, atheism, or the political and social anxieties of his generation." The engrossing facts of the case thus tend to be anchored in personality issues alone, reducing everything to the dimension of fratricide in a way that harkens back to an outdated and sterile era in psychoanalytic thinking. This verges on a caricature of the primacy of psychic determinism.

What makes a wider view of the Hiss-Chambers case essential is that Zelig's study again raises many of the very complex problems connected with what are the critical questions here: "What is the nature of clinical evidence?" and "What are its criteria?" That Chambers was unwilling to have any contact with the author whereas Hiss made himself freely available makes this an especially vital issue in evaluating this kind of research. It means that Zelig is forced to enter into Chambers's life history without access to the human being involved, that Chambers immediately becomes "a case" in a way that Hiss never does, and that the "continuity of evidence," in Erikson's words, regarding Chambers's life and his relationship with Hiss keeps getting read from the single vantage point of fratricide. Deprived of feedback from Chambers and the rigor that feedback from a patient provides, both Zelig and the reader are unable to arrive at any convincing sense of the rightness and unique fit of the interpretive view which the author so inflexibly proposes. Almost never did this reviewer sense that Zelig's attention to the facts of Chambers's life had been as imaginatively free-floating, as questioning, and as truly speculative as an author-analyst in his position must be. Instead, Zelig rapidly terminates a process of clinical inquiry to launch the argument of a thesis about Chambers that lacks much sense of relative probability or hierarchical ranking of possible meanings, and turns into a study in selective inattention.

Is there a meaningful readership for whom this book is seriously intended? A lay audience should not be expected to evaluate such clinical matters as the pumpkin-womb equation, for example,

or the varieties of magical thinking attributed to Chambers. As for a professional readership, a few of this clinician's many doubts as well as certain positive impressions about *Friendship and Fratricide* have been noted. Others will ask whether Zelig, like Bullitt and Freud, has not lost sight of the less impaired aspects of his subject's (Chambers's) ego functioning and whether or not contra-Hiss evidence

and arguments have been fully reported and evaluated. Many of Zelig's readers will approach his book with the passionate hope that it will be so exact and so persuasive that nothing could stand in the way of the Hiss-Chambers case being reopened, not just by an author, but by the courts. This hope is little realized in *Friendship and Fratricide* and one's disappointment, even anger, is correspondingly heightened.

Hallucinatory Experience as a Dialogue with Reality

Henri Faure

Hallucinations et Réalité Perceptive. Paris: Presses Universitaires de France, 1965. Pp. 255.

Reviewed by A. MONEIM EL-MELIGI

The author obtained a medical degree from the University of Toulouse and a doctorate in human sciences from the University of Paris. He occupied various teaching and clinical positions before his current appointment as Medical Chief at the Psychiatric Hospital of Bonneval (Eure-et-Loir), France. He is affiliated with various psychological and psychiatric societies in France and elsewhere. His last book is *Les Appartenances du Délirant*.

The reviewer, A. Moneim El-Meligi, has an MA in psychology (from Egypt) and a PhD in psychology from the University of London Institute of Psychiatry. After nine years of teaching in Egyptian universities, he came to this country as visiting professor of psychology at New York State University. He was Associate Director of the Psychology Service and Research Center at the New Jersey Neuro-Psychiatric Institute for four years and is currently a Research Scientist at the Bureau of Research in Neurology and Psychiatry for the State of New Jersey, Princeton.

PSYCHIATRIC textbooks and current clinical accounts often portray the

schizophrenic patient as a withdrawn, alienated, and apathetic individual. The over-all "image" that emerges is that of an "exile" whose ties with the world have been more-or-less severed. As the disease process gains momentum, the patient progressively withdraws his "egocathexis" from outside objects to live in a world of fantasy. Within this frame of reference, hallucinations are taken as evidence that the patient's imagery and "archaic impulses" have overpowered his perceptual functions and adaptive efforts.

In this book, the schizophrenic is placed in the world. We witness him striving to achieve a coherent view of his perceptual field, concerned about equilibrium and order in his surroundings. As any modern anthropologist would do in order to penetrate the private world of members of a preliterate society, the author gained access to the inner world of schizophrenics through their object relations.

BEFORE delving into the psychopathology of hallucinations, the author contributes an account of hallucinatory ex-

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periences as they occurred in history, myths, folklore, superstitions and mysticism. Here the author emerges as a great theoretician. He brings order into a whole body of knowledge contributed by various disciplines, thus providing a solid strategy for future scientific exploration of psychopathological experiences. Hallucinatory phenomena are clearly differentiated from memory, dreams, imagery, and mystic visions. Sartre's theory in the *Imaginaire*, relating hallucination to repressed memory, is brilliantly criticized. The author is of the view that hallucination should be studied in the context of a psychology of perceptual organization.

Gestalt concepts related to perception and field dynamics are utilized to demonstrate that hallucinatory experience never occurs as an independent imaginary event. It rather occurs in a Gestalt, a product of the patient's attempt to structure the surrounding field.

An attempt to capture hallucinatory experience "in effect" is made, utilizing the Village Test. This is a projective technique that requires the subject to build a village out of 135 little pieces of wood. The most interesting finding is that villages constructed by psychotics while hallucinated almost always included various vertical pieces of wood permeating the plane. Patients refer to them as posts, towers, chimneys, etc., even though they may be clearly defined architectural elements such as doors, windows or roofs of houses. The hallucinated patient does not seem to care much about the culturally recognized functions of these pieces within the architectural whole. All he cares for is to get these towering figures to dominate the entire village expanse. The author believes that these posts are "live" manifestations of hallucinatory beliefs. Invaded by a "hallucinatory influx," the patient must have in the external space vectors or supporters for his psychosensory experiences.

UNFORTUNATELY, the author, instead of interpreting this phenomenon in light of the phenomenological frame of reference that he adopted from the very start, suddenly resorts to Freudian con-

cepts. The posts represent parental demands; they are projections into the space of figures the patient used to perceive in past pathogenic situations as destructive, castrating, and dissecting. I am not convinced that the Freudian interpretation contributes anything at all to the understanding of the test findings. Not only is it irrelevant but it may also be misleading. The phenomenon discovered by the author is simply an anomalous organization of the spatial field. The author well knows that hallucinations could be produced directly by drugs, by prolonged sensory deprivation, by excessive stress or by hypnotic suggestions, without the mediation of personality dynamics. The determination of the intricate relationships between hallucinatory experience and other modes of perceptual distortion, and the effects of each of these on mood, behavior, and interpersonal relationships is a much more fertile enterprise than a preoccupation with the motivational basis of hallucination.

The author should be credited with a pioneering attempt to elucidate the link between hallucinations and the distorted organization of three-dimensional space. It seems odd, however, that he has completely overlooked the possibility that hallucinations may also be linked to distorted temporal organization. But this is not really a reproach; rather it is an invitation.

As a final evaluation of Faure's contribution, suffice it to say that his book deserves an audience, and it is to be hoped that it will be translated into English.



Loneliness does not come from having no people about one, but from being unable to communicate the things that seem important to oneself, or from holding certain views which others find inadmissible.

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The Biology of Maladjustment

D. H. Stott

Studies of Troublesome Children. New York: Humanities Press, 1966.
Pp. ix + 208. \$5.50.

Reviewed by ARTHUR R. JENSEN

The author, D. H. Stott, is Professor and Head of the Department of Psychology, University of Guelph, Ontario. He formerly was Lecturer in Psychology at the University of Glasgow. He is a prolific writer on juvenile delinquency, behavior disorders in children, and mental subnormality. Some titles are Delinquency and Human Nature and Unsettled Children and Their Families.

The reviewer, Arthur R. Jensen, spent the year 1966-67 at the Center for Advanced Study in the Behavioral Sciences, Stanford. He is Professor of Educational Psychology and Research Psychologist at the Institute of Human Learning, University of California, Berkeley. His PhD is from Teachers College, Columbia, and he subsequently spent three years at the Institute of Psychiatry, Maudsley Hospital. He has gone from work in clinical to personality to the experimental psychology of human learning. His present research is analysis of individual differences in short-term memory and he is at work on a book dealing with the biological and environmental determinants of educability. This is his 6th CP review.

THIS is one of the most interesting and meaty books that I have read in recent years and I would strongly urge many psychologists, psychiatrists, and educators to read it. It is especially important for workers in child psychology, the behavior disorders, clinical and school psychology, educational psychology, and special education. Also, it contains much that is highly relevant to the understanding of the problems of

many children now included among the group called culturally disadvantaged.

Stott has produced an excellently written, closely knit research monograph which brings much data to bear convincingly on a provocative hypothesis about the underlying causes of the behavior disorders that characterize what Stott calls "troublesome" children. The maladjustments of troublesome children are classified by means of the author's Bristol Social Adjustment Guide into ten categories, all of which will appear highly familiar to school psychologists: "Unforthcomingness"—a defect of natural assertiveness or curiosity; depression; withdrawal; unconcern for adult approval; anxiety about adult affection; hostility to adults; hostility to other children; anxiety for approval by other children; restlessness; and the "inconsequential syndrome"—a lack of foresight, planfulness and "temporal integration."

Stott questions the psychological folklore of our time that attributes these behavioral disorders primarily to unfortunate post-natal environmental experiences, particularly in the early parent-child interaction, which is so generally the suspected origin of later maladjustments. The far from perfect correlation between environmental conditions and maladjustment and the great differences that can be found among siblings within the same family lead to the question of genetic or congenital proposition to behavioral maladjustment. Stott believes that often a post-natal environmental explanation of a behavioral problem as due to, say, paren-

tal rejection or over-protection merely reverses the actual direction of causality. The parent's treatment of a child may often be an effect, rather than the cause, of the child's troublesome behavior.

Stott also challenges the cultural relativism notion that regards many forms of maladjustment, such as delinquency, as consisting of what the dominant culture of the society happens to disapprove. Stott argues that most forms of behavior disturbance are highly maladaptive even within the child's own social environment. Maladjustment is an organismic failure of basic forms of adaptation and transcends particular subcultural variations in customs and values. Stott fully acknowledges the role of unstable family situations in the etiology of behavioral disorders, but puts most of the emphasis on prenatal biological predisposing factors. The amount and variety of the evidence he adduces in support of his hypothesis of "multiple congenital impairment" are impressive.

HIS MAJOR THESIS is this: There are genetically determined individual differences in predisposition to prenatal impairment due to stresses on the mother—physical or emotional—during pregnancy, particularly in the later months of gestation. Genetic predisposition plus prenatal stress result in varying degrees of congenital impairment. Stott calls it "multiple impairment" because there is a marked correlation among various somatic and neurologic defects. He shows numerous instances where children who are selected for disorder A will also show a higher frequency of disorder B than will be found among a control group which does not show disorder A. Stott presents evidence showing that stress in pregnancy and general somatic and neurological abnormalities are much more frequently found among a wide variety of behavior disordered children than in control groups of behaviorally normal children. The impairment need not necessarily be evident at birth but may become manifest at some later stage of development or in response to a later environmental stress. Questions may be raised occa-

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tionally by specific methodological points in the data, usually concerning the adequacy of a particular control group. But viewed in toto the various studies form a highly coherent and convincing picture, one which has not been considered seriously enough by American psychologists. The relevance of Stott's hypothesis to the extremely important problem of the higher rate of behavior and school learning disorders in the low socioeconomic segments of our population is immediately obvious.

Why should there be a genetic mechanism predisposing to congenital impairments? Would not such genes have been eliminated through natural selection? Stott argues that such a mechanism may have had survival value for primitive man, but the protections provided in an increasingly humane technological civilization with its great advances in medical care have diminished the biological advantage of this mechanism for survival of the species. The gist of the argument is that, because of the need to control population, there is a genetic provision within all species for multiple impairments which are normally only potentialities that can be triggered off by prenatal stress associated with high population density, such as malnutrition, fatigue from over-exertion, emotional distress, infections, and the like. The resulting multiple congenital impairment would tend to cut down the infant population, thereby relieving the pressure of population without appreciably reducing the functioning and efficiency of the young adults in the population. Nowadays, of course, more children with multiple congenital impairments survive and are highly prone to a variety of behavior disturbances. For example, slightly more than a century ago a male child born in America had four chances in ten of dying before age 20; today the chances are only four in 100. Stott points out: "The paradoxical result is that, so long as the crucial importance of the prenatal phase for the future development of the child remains unrecognized, we shall have to reconcile ourselves to having an increasing number of disturbed children and therefore also of potential delinquents."



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Experimental Self Concepts

James C. Diggory

Self-Evaluation: Concepts and Studies. New York: Wiley, 1966. Pp. xiii + 477. \$9.95.

Reviewed by PAUL F. SECORD

The author, James C. Diggory, received his PhD from the University of Pennsylvania in 1948 and until 1966 taught there. Since 1966 he has been Professor and Chairman, Department of Psychology, Chatham College. He has had a persistent interest in experimental work on success and failure and its relation to self-evaluation. He is currently working on a book, *The Cult of Existence*, suggesting alternatives to the existential approach to clinical psychology.

The reviewer, Paul F. Secord, is Professor and Chairman, Department of Psychology, University of Nevada. His PhD is from Stanford and his research interest and publications are in the relation of self-concept to stability and change in interpersonal behavior. He is currently working on the problem of generalization from the laboratory experiment to everyday situations. He is author with Carl Backman of *Social Psychology*.

IN 1961 Ruth Wylie concluded, in her monumental review of research on the self concept, that self theories were vague, incomplete, and overlapping, that the total accumulation of substantive findings was disappointing, and that findings were of only limited value because of avoidable methodological flaws. She suggested that with more careful conceptualization and planning, self theory could be improved and more adequate empirical research carried out. The book reviewed here represents one fulfillment of this promise; in contrast to earlier research on the self, it is a clear statement of concepts and definitions in a

carefully limited aspect of self, and a report of a very extensive series of well-designed experimental research and other studies investigating this aspect of self.

The first chapter is a historical review of the concept of self that researchers and others interested in this approach to personality will find highly useful. The second chapter discusses the general problem of valuing or evaluation, as a prelude to the treatment of self-evaluation in the third chapter. The remainder of the book is a report on the various empirical studies conducted by the author and his colleagues. This is topped off with an excellent recapitulation in the final chapter.

For Diggory, the meaning of *self* is the same as that generally accepted by experimentally inclined psychologists: the person as an object to himself. Any act in which actor and object are the same is a *self-relevant* act. This appears to be a sound, neo-behavioristic position and incidentally, is remarkably similar to views expressed by several writers in the forthcoming volume on *Consistency Theory* (Rand-McNally).

The concept of self-evaluation is central in the experiments reported. Self-evaluation occurs when the "object being evaluated is a part, aspect, or product, of the very organism which does the evaluating" (p. 417). Primary interest is in a dimension of self-evaluation ranging from strongly positive to strongly negative. The research is akin to investigations of level of aspiration in that a theme common to virtually all of the studies is the evaluation of one's abilities as variously defined in specific

experiments. Before each trial subjects stated their estimated probability of success, in a variety of settings with subjects ranging in age from six to forty years. In one set of studies, the experimental tasks themselves fed back information to the subject (such as an experience of success or failure) that affected his self-evaluation of the relevant ability. In the other set, various social conditions (such as the presence of a successful or unsuccessful model) were introduced to study their effect on self-evaluation and behavior.

The range of problems tackled with these few concepts and procedures is impressive indeed. Resistance of a self-evaluation to change is shown to be a function of its specificity: when self-evaluations relate to general, unspecified fields of performance they are highly resistant, but when they are specific to the experimental task, they change in accordance with the subjects' experiences of success or failure. Repeated failure in experimental tasks is reflected in increases in the number of references to death in stories told by the subjects. This relates to a questionnaire finding that what people fear most as a consequence of their own death is their inability to carry out their chosen role in life.

SOME important data on the conditions under which self-evaluation of a specific ability generalizes to other abilities is provided. When an ability is an important one and highly rated, *failure* appreciably lowers evaluations of other abilities. But if the ability is a low-rated one, general devaluation of other abilities because of failure is much reduced. *Success* on a specific ability generalizes in a similar fashion but in the opposite direction. Two interesting styles of reaction to changes in self-evaluation are noted: some persons who fail on one ability rather quickly and completely devalue other abilities. Other persons make themselves vulnerable by declaring that no test of ability is irrelevant to their self-evaluations. Also noted is an interaction between the level of the individual's self-evaluation and the presence or absence of other persons while working on a

task. Persons with high self-evaluations make higher estimates of success when working alone than when others are present; persons with low self-evaluations behave in the reverse fashion.

In the set of experiments which introduced various social conditions, a variety of interesting findings were reported. A subject's estimates of his success on future trials were not at all affected when a model was present (ostensibly another naive subject) and failed in the same task. The successes of the model, however, resulted in an elevation of the subject's estimates of his own chances. Moreover, further experimentation revealed important individual differences between subjects. Persons with high self-evaluations were little affected by successes or failures of the model; those with low self-evaluations were decidedly affected by successes of the model, and negligibly by his failures. In the final social situation studied, choice of a work partner was investigated in relation to the degree of the partner's ability and the extent to which he was liked.

The writing is clear and well-organized, and the moves from hypothesis to experiment to new hypothesis are revealed so as to provide a clear picture of a behavioral scientist at work. In particular, the first set of studies where feedback from experimental tasks is automatic is a solid and lasting contribution to the literature on self-evaluation and ability. The second set of studies, which introduces various social conditions, is less satisfying, perhaps because of the inadequacy of present-day theory in this area (identification, conformity, and social facilitation), rather than any shortcomings of the investigator. Altogether, the book should be required reading for anyone who wishes to do research on self-evaluation and further, will merit attention from many others who provide a place for the self concept in their treatment of personality and behavior.



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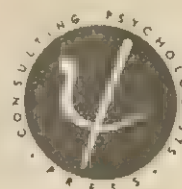
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Pavlovian Conception of Hypnotic Dreams

I. E. Volpert

Snoviděníja v Obyčnom Sně i v Gipnoze (Dreams in Normal Sleep and in Hypnosis). Leningrad, USSR: Medicina, 1966. Pp. 274. \$1.44.

Reviewed by STANISLAV KRATOCHVÍL and C. SCOTT MOSS

The author, Ilja Eugeněvič Volpert, is a Candidate of Medical Sciences, and was for a number of years a department head in the United Clinical Psychoneurological Hospital of I. P. Pavlov in Leningrad, where the famous "Wednesday" clinical sessions of Pavlov were held. At the time Volpert conducted the work reported in this book, he was a research associate in the Laboratory of Physiology and Pathology of Higher Nervous Activity at the Pavlovian Institute of Physiology (USSR Academy of Sciences, also in Leningrad). Volpert, now aged 70, is retired; however, he continues to work as a psychotherapist and is preparing a book on psychotherapy for general practitioners.

The first reviewer, Stanislav Kratochvíl, PhD, is Assistant Professor of Psychology, University of J. E. Purkinje, Brno, Czechoslovakia, and Chief Clinical Psychologist at the Kroměříž Psychiatric Hospital. His professional interests include psychotherapy, psychodiagnostics, and experimental hypnosis. He has published extensively in these areas, including a text entitled *Psychotherapy* (SPN Praha, 1966). C. Scott Moss, formerly Consultant for the National Institute of Mental Health in San Francisco, is now Professor of Psychology, University of Illinois. He has recently published a book on *The Hypnotic Investigation of Dreams* (Wiley, 1967). He received his PhD from the University of Illinois and taught at the

University of Kansas as a visiting professor until 1961 when he went to NIMH.

THE AUTHOR formulates the objectives of his work as follows: (1) to clarify the nervous system mechanism of dreams; (2) to elucidate the psychological meaning of dreams; and (3) to verify the suitability of hypnosis as an experimental technique for the investigation of dreaming. Unfortunately, the report lacks conviction on all three counts.

The first part of the book is a *history of conceptions of dreams* from antiquity to the end of the 19th century. Section Two, entitled *Idealistic Theories of Dreams of Today*, critically reviews and rejects psychoanalytic and other Westernized conceptions, while maintaining that dreams can serve to identify the causes of psychiatric disorders and provide an enhanced understanding of personality. In the third part, called *Fundamentals of a Scientific Theory of Dreams*, Volpert promulgates the familiar Pavlovian theory of sleep, hypnosis, and dreams. Succinctly stated, normal sleep is characterized as an inhibition extended over the whole cortex and to certain subcortical centers as well. A dream is depicted as an excitation of elements in a sleep inhibited cortex, and is always in response to immediate internal and external stimuli. The basis for dreaming is an unstable

and uneven inhibition. Hypnosis is represented as grounded in a fixed organization of a broadly diffused inhibition and the creation of a focus of excitation which is the basis for rapport between subject and hypnotist.

The fourth and original part of the book reports the results of the author's own experiments, based on material obtained from 28 hypnotically treated, neurotic (mainly "hysterical") patients in the period 1947-51. Two hundred and six hypnotic dreams of these patients were collected, and 63 of them are reported in detail. Dreams were collected in the immediate hypnotic situation, not with the so-called post hypnotic type of dream occurring at night.

CONSISTENT with other reports in the literature, the typical dream was vivid but brief and rather pedestrian. The experimenter actually displayed limited interest in the meaning of the dreams produced, did not differentiate between overt and covert content, and was concerned instead with an exact and detailed description of the experience. There was little evidence of dreamwork mechanisms, such as condensation or symbolization, which is again compatible with many reports in the literature.

Volpert concludes that the products of the experiment for the given person "did not differ from the dreams in the normal state." Doubtless he was led to this conclusion by his subscription to the Pavlovian assertion of the fundamental equivalence of sleep and hypnotic states; logically, the products of the two states would have to be closely related. Volpert readily agrees that the EEG pattern in the hypnotic state is substantially an awake one, although it has been rather frequently maintained in the Soviet literature that deepening of the hypnotic trance can produce an EEG approximate to that of normal sleep.

THE employment of dream analysis in psychotherapy is only alluded to by Volpert. The reporting of dreams is apparently not encouraged by the Soviet psychiatrist, but when the patient volunteers a dream the therapist may in-

quire into its origin in terms of current experiences, thus acquiring conscious anamnestic material in a more-or-less inconspicuous manner but without any pretense of "deep analysis." This approach reflects the fact that the issue of the conscious determinants of behavior remains a sensitive issue in the USSR. Symbols in dreams are conceived of as accidental fragments of a focus of heightened excitation which dominates the rest of the cortex. If a therapist wishes to understand the symbolic character of a dream, he must go "just the opposite way to psychoanalysis" and turn to a thorough understanding of the conscious personality as determined by the reality of work and social experience.

Probably because of a basically neuropsychophysiological conception, hypnosis enjoys a greater degree of medical-scientific acceptance in the Soviet Union than in any other country; therefore, it is disappointing that this book provides no new insights regarding the employment of hypnotic techniques in the investigation of dreams. The author demonstrates considerable naiveté regarding the rudiments of experimental design and a substantial unawareness of crucial variables involved in research of this nature. Volpert is insufficiently informed about the contemporary experimental sleep and dream work throughout the world. There are only eight references to studies conducted in the USA, three of which pertain to the topic under investigation, the most recent one having been published in 1950. The work presented in this volume was dated even at the time it was generated 15-20 years ago. What considerations delayed publication to this date? How representative of contemporary work in the field in the Soviet Union is this study? The paraphernalia of objective, physiological measurement might have been impressive before the advent of sophisticated electrophysiological studies of sleep and dreams during this past decade; now it serves to remind that intricate instrumentation cannot compensate for inadequacies of research design and methodology.

Those who carefully discriminate between factual description and interpretation will be given repeated pause by

Volpert's imposition of explanatory constructs on observable behavior. He occasionally makes errors of the "non sequitur" type; for example, he cites the fact that in 15 instances subjects volunteered "spontaneous" dreams as evidence that hypnosis is a form of sleep, rather than attributing the unsolicited dreams to the demands imposed by the experimental situation. Most distressing of all, where factual evidence is clearly absent, Volpert engages in ideological polemic, seeming to believe that he has disposed of opposing arguments by labeling them as "idealistic" or bourgeois.

Non-Quack Answers to Quick Marriages

Aaron L. Rutledge

Pre-Marital Counseling. Cambridge, Mass.: Schenkman, 1966. Pp. xiv + 336. \$8.95.

Reviewed by ROBERT A. HARPER

The author, Aaron L. Rutledge, has training in both psychology and theology and has been since 1953 Head of the Psychotherapy Program of the Merrill-Palmer Institute in Detroit. He is former President of both the American Association of Marriage Counselors and the National Council on Family Relations. He is convinced that "pre-marital counseling affords the most opportune occasion in an adult's life for the resolution of personality differences and a positive investment in individual and family health." He is co-author with Gertrude Gass of *Nineteen Negro Men: An Experiment in Manpower*.

The reviewer, Robert A. Harper, is in the private practice of individual and group psychotherapy in Washington, D. C. and is Rutledge's predecessor at Merrill-Palmer. He is past President of

the American Association of Marriage Counselors and of the American Academy of Psychotherapists. He was a participant in the 1965 Conference on the Professional Preparation of Clinical Psychologists and was a member of the Committee on the Scientific and Professional Aims of Psychology (Clark Committee) and the Committee on Relations with Psychiatry of APA.

IDEALLY, the author seems to suggest, preparation for marriage might be considered a kind of increasingly beneficent circular process from babyhood to matehood to parenthood and back to babyhood. In reality, however, such happy circles often get marred and broken. Rutledge has, therefore, stepped into the chasm with a text directed to "those professional people who are involved in the task of preparing youth for married living, including parenthood."

Probably because of the presence of marriage counseling charlatanism in the yellow pages of both journalism and phone directories, psychologists and other professionals sometimes view dimly even the nonquacks who specialize in this form of counseling. As this text adequately demonstrates, this occupation, when conscientiously approached, is not an easy little art of moralistic advice-giving. Even the moderately effective marital and pre-marital counselor needs to know much of what is practically available about individual dynamics plus a great deal of specific details about pre-marital, marital, and family interactions.

Knowledge of such interactions and how to apply such knowledge to counseling couples about to marry is what Rutledge tries to pack into this book. Although the reviewer was prepared to believe any author would fail to accomplish a neat and utilitarian minipacking of such diverse and complicated material, Rutledge has, in fact, succeeded fairly well.

THE AUTHOR's basic approach is to view engagement as a specific learning period in which the couple tries to understand and relate to each other, to

unlearn inappropriate behavior patterns, to determine realistic marriage and family goals, and to develop satisfactory methods of moving toward those goals. The pre-marital counselor, viewed in this context, serves to facilitate the learning process. In Rutledge's words: "The counselor's goals with the engaged couple are (1) to test the growth and growth potential of each personality, (2) to develop skills in and to stimulate spontaneous communication, and (3) to expose areas of stress and develop problem-solving skills. Either by individual or group contact he helps them face up to existing problems and additional ones that can be anticipated. He can help them create an environment in which to clarify hindrances to growth and relating, to stimulate and capitalize upon feelings of adequacy, and to develop skills in relating and problem-solving which facilitate growth, both of the individuals and of the relationship" (pp. 22-23).

As any grime-covered and time-worn therapist will recognize, such golden goals as the foregoing are found only in writing and not in the nitty-gritty of clinical functioning. Although allowance must be made for these occasional bursts of inspirational theory, most of the book is devoted to practical information.

Rutledge has his book conveniently arranged so that Part Two deals with the elements and the literature of personality theories, methods of psychotherapy, sex education, religion, divorce laws and other matters that he calls "Prerequisite Knowledge and the Content of Pre-marital Counseling." The reader who is familiar with this material can focus his attention on the first and main section: here Rutledge succinctly and clearly discusses "Goals, Process, and Dynamics of Pre-marital Counseling."

A fundamental question never discussed in the book is whether pre-marital counseling is a hopelessly idealistic enterprise. It is not an unreasonable contention. First, under present social circumstances, those most in need of help seldom get it or even know they need it. Second, it is hard to make the pre-marital counseling ex-

perience truly practical. It is something roughly analogous to trying to teach someone how to fly a jet with nothing better than words and pictures. And, third, even the generalized theoretical information we have about how to have a happy marriage is often pretty fuzzy and foggy and functionally doubtful.

But Aaron Rutledge cannot be blamed for the inadequacies of a whole field of knowledge. A writer in *Science* recently defined an optimist as a person who believes this is the best possible of all worlds and a pessimist as one who is afraid the optimist is right. Rutledge presents the currently best possible world of pre-marital counseling.

A Primer for Differential Schizophrenic Diagnoses

Irving B. Weiner

Psychodiagnosis in Schizophrenia.
New York: Wiley, 1966. Pp. xiv
+ 573.

Reviewed by LEONARD BLANK

The author, Irving B. Weiner, received his PhD in 1959 from the University of Michigan. Since then he has been at the University of Rochester School of Medicine and Dentistry, from 1964 as Assistant Professor of Psychiatry.

The reviewer, Leonard Blank, received a 1955 PhD from NYU. He is an Associate Professor in the Department of Educational Psychology at Rutgers Graduate School of Education and in the private practice of psychotherapy in Princeton. He is author of Psychological Evaluations and Psychotherapy: Ten Case Histories and

co-editor of Sourcebook for Training in Clinical Psychology.

THIS is a well written book, richly detailed and documented. The objective of the author, to demonstrate how the psychologist may "use test data to make diagnostic judgments about schizophrenic persons," is largely realized. The reader is provided with ample, skillfully presented material for making intraschizophrenic differential diagnoses.

Others may share with the reviewer, however, his disappointment in not finding material contrasting schizophrenics with other diagnostic categories. Although the author argues that such inclusiveness is more valuable for clinical practice, the practitioner is not concerned primarily with differentiating one schizophrenic subgroup from another. Rather, the clinician most usually is faced with distinguishing schizophrenia from brain damage, intellectual retardation, borderline cases, and severe character disorders. Moreover, the comparison of the test material of these various categories may enlighten us about the schizophrenic process itself.

Weiner does thoroughly review history, theory, and diagnostic research in schizophrenia. Particularly valuable are his chapters on acute vs. chronic, decompensating vs. remitting, paranoid vs. non-paranoid, and borderline vs. pseudoneurotic. In each of these chapters, the clinical literature is reviewed and test indices for differential diagnoses are considered. The assessment issues related to defensive operations and to autonomous and synthetic functions are also valuable.

THE CHAPTER on adolescents, comparing their "normal" turmoil with schizophrenia offers promise but falls short because only two cases are presented. One case is of a teenager with a history of mild sexual acting out and the other of a teenager with a history of long-term paranoid schizophrenia. On the basis of the test material alone for these two cases, the evidence distinguishing schizophrenia from merely adolescent turmoil did not appear convincing.

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ANALYSIS OF BEHAVIORAL CHANGE

Edited by L. WEISKRANTZ

Ready April. The authors explore the problems of analysis which emerge in the studies of the behavioral effects of various experimental procedures: brain lesions, drug administration, brain stimulation, and others. Intended to be a closely reasoned but informative analysis of how treatment-induced changes in various categories have been or might be attacked, the arguments have both form and content, but the authors have tried to look at those aspects of form which will be persistent. The empirical content, accordingly, is illustrative rather than exhaustive and includes extensive material from the fields of neuropsychology and psychopharmacology. Line drawings, chapter bibliographies. 439 pp.

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Other limitations in the text are the lack of references to prognosis and remediation plans. The clinician is not instructed as to what use to make of the psychological evaluation other than obtain a diagnostic label. (This, despite the fact that the author gears his book primarily towards the graduate student in clinical psychology). Nor are test responses related to behavior. That is to say, a test response for a schizophrenic, or for any diagnostic category for that matter, is instructive primarily as it is predictive of, or illustrated by, the actions of the person described (Blank, 1965).

The most severe restriction is the limited use of test techniques. Weiner uses only the Rorschach, DAP, and WAIS. Although he cites the wide use of the TAT and Bender-Gestalt in clinical services, he does not include them. Nor does he even refer to the MMPI which enjoys a wide popularity and is especially useful in a preliminary screening of schizophrenia. (Dr. Weiner relies heavily on his exposition of the Rorschach and WAIS, and successfully so. His presentation of DAP material, on the other hand, is fairly weak and suggests that he is least comfortable with this technique.)

But what is glaringly omitted is the interview. Not only has interview repeatedly been demonstrated as the most valuable clinical procedure for diagnostic purpose but it provides the linkage between the live patient and his isolated test responses. The case material is also sparse, even when most pertinent such as in the differentiation of chronic and acute schizophrenia.

Nonetheless, *Psychodiagnosis in Schizophrenia* is a valuable supplement to *Diagnostic Psychological Testing* (Rapaport, Gill and Schafer, 1945 and 1946) and *The Clinical Application of Psychological Tests* (1948). If he carefully reads this book, the reader will be more informed as to the schizophrenic process as well as to the subtle issues of differential diagnoses.

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The Great Man Approach to History

Mary Louise Seguel

The Curriculum Field: Its Formative Years. New York: Teachers College Press, 1966. Pp. x + 203. \$3.25 (paper), \$4.50 (cloth).

Reviewed by JOHN A. BROWNELL

The author, Mary Louise Seguel, has been Associate Professor of Education, Northern Illinois University, since 1959. She received her EdD from Teachers College, Columbia, and has been Adult Education Director, Chileno Norte Americano Instituto de Cultura, Santiago, and Curriculum Director, Wapato Washington Schools.

The reviewer, John A. Brownell, is Researcher and Professor of Education, and Associate Director of the Hawaii Curriculum Center, all at the University of Hawaii. His EdD is from Stanford, and he formerly was Professor of Education and Director, Secondary Teaching Internship Program, Claremont Graduate School. He was Harold Benjamin Fellow in International Education during 1964-65 and recipient of the Phi Delta Kappa Research Award in International Education, 1967-68. He is the author of *Japan's Second Language: A Critical Analysis of the English Language Program in Japanese Secondary Schools*, and with Arthur R. King, Jr. of *The Curriculum and the Disciplines of Knowledge*.

THE COMPENDIA of 'principles' of curriculum making and the dreary accounts of personal lore so often presented in curriculum books fail to account for the significance of curriculum considerations and the genuine inspiration they can offer. The attempt of Seguel or others to treat the field of curriculum historically or theoretically, and briefly, can only be applauded and accorded careful reading and criticism.

Seguel sets out to write a history of the course of thought from 1895-1937 which established curriculum as a differentiated field of study. She identifies the field as the study of the act of curriculum making. Her approach to its history is to select seven "educators judged to be particularly influential on the rest," and to "examine the writings of each during his influential period." From this examination she seeks to discover how each perceived the educational situation, why he became interested and involved in the study of the curriculum, what proposals he made about the curriculum, and how relevant his proposals proved to be. She states that she is drawn to cause and effect interpretation of the connections among events, and to four persistent interests which she perceives as characterizing the period: the nature of knowledge, the nature of knowing, the limits of other concurrently emerging divisions of pedagogy, and the search for a technology of genius. She marks the establishment in 1937 of the field of specialization by Hollis Caswell's organizing the Department of Curriculum and Teaching at Teachers College, Columbia University. She opines that in the ensuing quarter-century there has been remarkably little basic change in the field and that its 1938 forms are still fresh and timely.

SINCE this history of the field is a nationalistic one, the universality of the field of curriculum making remains uncertain. There is a question of the adequacy of the "great man" approach to the history of a course of thought. Limiting the effect of that course on the field of curriculum to seven Americans associated with professional education ignores the contributions of many

other scholars, especially those involved with the curricula of higher education, and the inter-connected quality of the world of ideas. Furthermore, no explication of standards for selection of these specific seven as "particularly influential on the rest," for the identification of their "influential period," or for judgment of the relevancy of their proposals is given. The preponderance of discussion given to elementary school curriculum making does not handle adequately the historical events in secondary and higher education. The four persistent interests are not clearly identified for the reader as the chronicle unfolds.

Events challenge the complacent view that since 1938 the field of curriculum and its specialists have had the necessary basic insights and that the 1938 forms are fresh and timely. The past fifteen years have seen a succession of curriculum reforms which tended to ignore much of the curriculum professionals. Both the decisions to change and the processes of curriculum making in mathematics, the sciences, foreign languages, English, and perhaps even the social studies, have occurred in large part outside the field of curriculum and its conventional forms. Two trends discernible in Seguel's history may account for the contemporary situation: the separation of curriculum making from the inquiry and structures of knowledge-generating communities, and the failure to distinguish schooling from the whole range of other vital but unorchestrated avenues of education such as family, church, vocation, mass media, military service, and politics. In ordinary language the term "curriculum" goes with schooling. When applied to all the avenues of education which we capriciously encounter, it tends to lose meaning.



He is playing at being mad to avoid at all costs the possibility of being held responsible for a single coherent idea, or intention.

—R. D. LAING



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312 Pages / Illus. / \$6.75

THE PSYCHIATRIC CONSULTATION

Edited by Werner M. Mendel, M.D. and Philip Solomon, M.D.

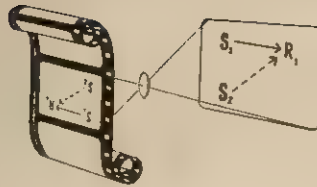
The psychiatrist devotes his time and talents increasingly to the development, supervision, and administration of treatment programs, so that he has less time for direct treatment service to the patient. It is the purpose of this book to define the process of the consultation, to evaluate the currently available techniques of teaching consultation practice, and to elaborate specialized techniques of consultation. This book will serve as a valuable aid in enabling the psychiatrist to function adequately in the role of leader of the mental health team.

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INSTRUCTIONAL MEDIA



Social Patterns of Baboons

Irven DeVore and Sherwood Washburn

Baboon Ecology. University of California Extension Media Center, 2223, Fulton St., Berkeley, California 94720, 1963 (PCR-2132K). 21 minutes, color, sound. Rental, \$7.20; sale, \$190.

Baboon Behavior. University of California Extension Media Center, 1961 (PCR-2107K). 31 minutes, color, sound. Rental, \$11.20; sale, \$245.

Baboon Social Organization. University of California Extension Media Center, 1963 (PCR-2133K). 17 minutes, color, sound. Rental, \$6.00; sale, \$160.

Reviewed by ROBERT W. LEARY

Irven DeVore and Sherwood Washburn are well known anthropologists, who, being concerned with the evolution of behavior, look at living animals. Washburn is a department head at the University of California, Berkeley, and DeVore is at Harvard. Both authors have published frequently. Of special interest to psychologists is Primate Behaviour, 1965, edited by DeVore, and Classification and Human Evolution, 1963, edited by Washburn.

The reviewer, Robert W. Leary, received his doctoral training at the University of Wisconsin and now investigates the learning and social behavior of different species of monkeys at the Uni-

versity of Oregon. He likes to take candid pictures with small cameras and he has made motion pictures of gorillas, cats, and monkeys, all in cages.

THERE three films made of *Papio anubis* in the National Nairobi Park document one of several recent extensive field investigations of primates conducted by behaviorally minded anthropologists. This particular study promises to become a classic because of its primacy, its attention to total behavior—events are seen in context—and its successful embellishment of baboon character. The old picture which many of us have of the totalitarian gangster is gently erased. The present

review is directed primarily at the third film which is the best for psychologists, but comments will be made on the others.

Baboon Ecology, the most aesthetically pleasing film, deals with behavior as affected by the environment. A baboon troop has a range (territory) outside of which it does not go and within which there is a core area which is not invaded by other troops. Movement and activity have a daily pattern and are contingent upon the location of water and food (seasonally variable) and the location of trees in which sleeping occurs. Because of predators, the troop organization has survival value; stray animals are not apt to survive. Contact frequently occurs with other animals and is sometimes advantageous as when a reaction occurs to the alarm response of another species.

Baboon Behavior is a general account which includes most of the principal points of the other two films. However, environmental factors are described relatively briefly and the bulk of the footage deals with such topics as the infant-mother relationship, juvenile play, female-male relationship,



The spatial distribution of dominant males, peripheral males, mothers, and juveniles from *Baboon Social Organization*.

and the dominating and protecting functions of the male. The pace of this film is fairly leisurely and the narrative is more descriptive and less conceptually oriented than that of the third film.

Baboon Social Organization presents the structural statistics of a troop, the typical spatial distribution during rest and also during troop movement, the response to outside threat, the dominance of the central males, the changing and unstable position of the female, the diminishingly protective activity of the mother, the attractiveness of the infant, the beginning of play, the formation of peer groups, and the unity of the troop. Cohesive forces and cooperative functions are emphasized. The dominant males are both a security force and a socializing influence; they inhibit fighting in young animals, keep (through a coalition) aggressiveness of other males in check, offer a haven for mothers and babies, and form a shield against predators. Anthropomorphically one might say that dominance entails certain responsibilities and provides certain prerogatives, among which biting other animals ranks much lower than being groomed. Sex is not emphasized in the film; it appears as a rather occasional factor integrated with other functions, notably dominance, which together with infant-adult relatedness, emerges as the strongest identifiable socializing force. However, the authors suggest that most of the social skills are learned in juvenile groups. The film ends on the note that daily life is not dominance oriented; feeding and grooming are more prominent activities than dominance.

The filming which may have been difficult and painstaking on location turns out to be only "fair" by sophisticated standards. (However, the reader should be cautioned that other critics have been quite enthusiastic and that at the 1961 American Film Festival in New York a blue ribbon award was given to *Baboon Behavior*.) The color is not bad but tends to be weak, a trifle washed out, and the animals are seen in snatches of action; often the most interesting behavior takes place at a distance in a camouflaging landscape and passes by quickly. There are fewer

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close-ups than one would wish and there is no slow motion which might have been very helpful in explicating the details of social response. In *Baboon Social Organization* several excellent, but too briefly presented, diagrams show the spatial distribution of dominant males, peripheral males, mothers, juveniles, etc. under different conditions (see figure). Without the narrative, which is strong and clear, and without, in the third film, the diagrams, a layman would not be able to grasp the import of many scenes. Even so, the narrative is closely synchronized with the action and the critical events may be fading from the screen just when we realize what we should be looking for. This reviewer felt he could have maximized his comprehension of baboon society by keeping his eyes shut most of the time and concentrating on the sound track. On the other hand, the visual component undoubtedly creates an impression of authenticity that will stimulate most audiences.

Of course it is easy to be an arm-chair critic. A possible lesson to be learned from these films is just how hard it probably is to obtain detailed records in the field and to make sense out of them. It would be very interesting to have in a film the methodology of the scientist observer.

The central theme, especially in *Baboon Social Organization* is that baboons have a smoothly working social pattern, that every baboon has his place in the sun, and (retrospectively) that behaviors that have been interpreted as cruel, unpleasant, and excessive are in reality both ordinarily mild and functionally integrative. This interpretation should be very acceptable because it affords links to the evolutionary mechanisms stressed by Lorenz, and it also leaves plenty of room for the effects of conditioning as studied by Harlow.

Perhaps it is paranoid to detect here a criticism of laboratory research. But sometimes a little cold war does exist between the field oriented scientist, usually anthropologist, and the laboratory oriented scientist, often psychologist. (Parenthetically, it seems appropri-

ate to note that C. R. Carpenter, the psychologist, is the most visible pioneer of field work and that recently several younger psychologists have been actively engaged in studying monkeys in their natural habitat.) As a student of primate social behavior who places his subjects in small and medium sized cages, the present reviewer finds the work of Washburn and DeVore most engaging. In general, this work seems to support the importance that experimental analysis has placed on dominance, juvenile play, contact with the mother, and so on. There certainly is a problem in understanding how the context, which in laboratory work can often be called not only artificial but purposely artificial, influences behavior, but hopefully progress in field work will make it more and more possible to find answers.

Epidemiological Excellence

Michael Shepherd, Brian Cooper,
Alexander C. Brown, and Gra-
ham Kalton, with a foreword by
Sir Aubrey Lewis

*Psychiatric Illness in General Prac-
tice.* New York/London: Oxford
University Press, 1966. Pp. xvii +
220. \$10.50.

Reviewed by LESTER M. LIBO

The first two authors, Michael Shepherd and Brian Cooper, are psychiatrists at the Institute of Psychiatry, Maudsley Hospital; Shepherd is Reader in Psychiatry and Cooper is Senior Lecturer. Brown, also a psychiatrist, is Senior Lecturer in Psychological Medicine at the Welsh National School of Medicine, Cardiff. Kalton, an economist and statistician, is Lecturer in Social Statistics at the London School of Economics.

The reviewer, Lester M. Libo, a Stanford PhD, worked at the University of Michigan Institute for Social Research and at the University of Maryland Medical School before coming to New Mexico in 1957, first as Director of the Division of Mental Health, Department of Public Health, and, since 1961, as Associate Professor and Director of the Behavioral Science Program in the Department of Psychiatry, University of New Mexico Medical School. Recently he helped develop a new curriculum in psychosocial medicine for medical students.

THIS BOOK is laden with riches. It starts with a straightforward question about the prevalence of emotional disorders among the patients of 84 general practitioners in 50 practices in London. (The time sample was one year period in 1961-1962.) Before the expedition is ended, the reader is led through a number of fascinating side-trips, which explore, with painstaking and sophisticated thoroughness, the various alternative explanations for each finding. Fortunately, for most of these alternative possibilities, data were at hand or were specially collected, so that what starts as a question about sampling bias may end with conclusions about the Cornell Medical Index, the effects of a physician's psychosomatic orientation, the correlates of mobility and chronicity, and the reasons for not referring patients to psychiatrists.

What is most remarkable for a text that has 63 tables and figures in the space of a mere 220 pages, the material is presented in a thoroughly enjoyable way. It reads like a detective story, sweeping the reader along in close identification with the authors' efforts to trace each clue in full appreciation of biological, psychological, and socio-cultural dimensions of emotional 'illness' and how it is reported. The critical reader, who greets each finding with a quizzical, "Yes, but what about —?", will discover to his amazement and joy that the authors do the same, often one step ahead of the pack. The result is a dizzying tour-de-force.

Since there are so many sub-studies in this labyrinthine quest, one would have appreciated a somewhat longer

Conclusions chapter, with a more complete summary of the many findings. As it is, one must turn to the list of tables for aid in recall.

THE VALUE of this work seems not so much to be in its equivocal findings regarding morbidity, but rather in the systematic approach and sophisticated methodology it illustrates, and particularly in the evidence it presents which raises questions about the utility of current psychiatric diagnostic classification, the weakness of the illness model for emotional problems, and the effectiveness of the physician—at least in England—in his front-line role as a case-finder and care-giver in mental health. In spite of the fact that most of these physicians, perhaps as a reflection of their British gentlemanly ways, professed to the psychiatrist-researchers an ideology favorable to a psychiatric approach toward emotional and psychosocial problems in their patients, they were unable or unwilling to act that way in their practices, which were often assembly-line affairs, with an average of only a few minutes devoted to each patient. They missed many obvious cases, they seldom did psychotherapy or made referrals to psychiatrists, and they collaborated even less with social agencies. Their major means of dealing with emotional problems was medication and brief reassurance and advice. They devoted more psychotherapeutic effort (including referrals) to adolescents and younger adults, so that the groups with the greater need, the older age and chronic groups which had higher prevalence rates, were neither referred nor adequately treated at this echelon of care.

This book should be an excellent choice as a casebook in methodology for graduate students and workers in community psychology, mental health, and epidemiology. It should also be taken seriously by medical educators, psychiatrists, and others who look to the general medical practitioner as their major resource in community mental health.



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Edited by David W. Brison and Edmund V. Sullivan

Reports of three investigations: acquisition through film modeling techniques, by Edmund V. Sullivan; relation of conservation of substance to cognitive structure, by Siegfried Engelmann; and acquisition of conservation in normal, retarded, and gifted children, by David W. Brison and Carl Bereiter. Contains an introductory overview of Piagetian theory on the acquisition of conservation of substance.

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By Edmund V. Sullivan

Evaluates Piaget's theory of intellectual development and its implications for curriculum development—in particular for the assessment of intellectual capacity, the structure and sequencing of subject matter, the evaluation of learning outcomes, and the generation of appropriate learning atmospheres.

Accelerated Learning and Fostering Creativity

1968/P. iii+40/\$1.50/In press

Edited by David W. Brison

Papers selected from the Phi Delta Kappa OISE Centennial Symposium "How Children Learn," held at Toronto in February 1967. Two papers deal with acceleration of learning, and two with the fostering of creativity. Contributors are Daniel E. Berlyne, University of Toronto; David W. Brison and David P. Ausubel, OISE; and Kurt Danziger, York University.

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PUBLICATIONS

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Disappointing Child Development

Henry W. Maier

Three Theories of Child Development: The Contributions of Erik H. Erikson, Jean Piaget and Robert R. Sears and Their Applications.
New York: Harper & Row, 1965. Pp. xvi + 314. \$6.75.

Reviewed by JOHN P. MCKEE

The author, Henry W. Maier, is Professor of Social Work at the University of Washington. He has also taught at the Universities of Minnesota and Pittsburgh, and spent a Fulbright year in England.

The reviewer, John P. McKee, has not changed since he last reviewed for CP. He is Associate Professor of Psychology at the University of California, Berkeley.

IN just about every way—thoughts, facts and style—this apparent library doctoral research, subtitled “The Contributions of Erik H. Erikson, Jean Piaget and Robert R. Sears and Their Applications,” disappoints. Maier clearly worked hard, undoubtedly learned a good deal and says many things that are true. But his exposition of the three points of view is neither clear, critical, nor correct, and his attempt to show the implications of each theory for the “helping professional” is often strained, occasionally vague, and sometimes no more than a generalization from the broad field of human psychological development. As an example of the last point consider this assertion: “But a child’s attempt to relieve his frustrations through aggression, as we learned from Sears [my italics], often requires careful handling” (p. 250).

Below are examples of Maier’s treatment of each theorist.

In discussing Erikson’s “sense of basic trust” Maier writes that it is to be established during “the rapid maturational period of infancy. It is a period when body growth can be overwhelming and can invite much mistrust, unless new modes of body behavior provide adequate compensation” (p. 32). The implication is clearly that maturation and growth are hazardous. But three sentences later in the same paragraph we discover that “Whether the infant is to become a trusting and easily satisfied person in society or a mistrusting and demanding person . . . is, in large measure, determined by the form of handling he received during this first phase.” Well, does Erikson claim that growth is inherently dangerous or that mishandling is dangerous? Or both?

Here is another example. “The field of each individual can accelerate, retard, change the order of succession [my italics] of the individual growth process. This assertion, basic to Piaget’s theory, justifies his major concentration upon the phases of development which are irrevocable in their sequence.” The two sentences are contradictory.

Sears does not escape either, for on page 170 we find that during early and middle childhood “A nonmotivational system, that is, identification, emerges and becomes a goal-response.” Yet we also discover on page 176 in Maier’s brief summary of Sears’ Developmental

Theory that “Identification . . . is another motivational system . . . which drives [the child] to behave . . . as learned by means of identification . . .”

I regret making these unfavorable observations. But the book should never have been published. I doubt that Maier received much help from the staff at Harper and Row or from W. W. Boehm of Rutgers who wrote the Editor’s Introduction. Consider these remarks: “However, it is Sears who had the courage to risk his own reputation by publishing under his own name not only his own findings, but also those of others” (p. 8). “In the true sense of . . . meaning of the term, Erikson is a psycho-psychologist” (p. 74). “Sears . . . scientist by virtue of his field, believes in the discernibility of knowledge of the universe” (p. 149). “Piaget goes so far as to hypothesize that all physical, biological and psychological laws can be integrated into a single universal formula” (p. 181). Surely even an undergraduate’s term paper would have had such sentences blue-pencilled by someone—had the someone read them.

The moral? Not everything that contributes to an individual’s intellectual growth should be offered to the scientific public even if three famous names in the title suggest profit to a publisher.

Another review of this book can be found in *Social Work*, 1967 12, 2, 134-135.



An artist must coax his genius; he must not let it scatter itself at random. Turn your force into a channel. Train yourself in habits of mind and a healthy system of daily work, at fixed hours. They are as necessary to the artist as the practice of military movements and steps to a man who is to go into battle. When moments of crisis come—and they always do come—the bracing of steel prevents the soul from destruction.

—ROMAIN ROLLAND



ON THE OTHER HAND



In this Department CP invites discussion of reviews and of books reviewed. Here is the place for that kind of intellectual dissent that promotes progress in understanding. Let your criticism be ad verbum, not ad hominem. Seldom does a criticism merit more than half the space of the text criticized—never more than equal space and then only when the letter is interesting and well written. CP edits letters when it thinks they should be. Single-spaced letters will be returned for double-spacing. Please send carbons.

SUGGESTION

Sometimes two CP reviews of one and the same book are printed in one and the same issue of the journal—as in the case of the two reviews, the one by David

McNeill and the other by Jean Piaget, of Jerome Bruner's book (CP, November 1967). More often, though, the second CP review of a book takes the form of a review of the second edition of the book, and the reader who wishes to compare the opinions expressed by the two reviewers must search out the first-edition review in a back number of the journal—as in the case of Audrey Shuey's book, whose second edition was reviewed by Ralph Dreger (CP, February 1967) approximately nine years after Roger K. Williams reviewed the first edition.

To locate the review of the first edition is a time consuming task, when the exact year of its publication is not known. It would be helpful if a bibliographic reference to the review of the first edition were included in the review of the second edition.

DOROTHY RANSOM
Orchard Lake, Michigan



Panic can seize a crowd or an individual, making men run for no known reason in search of no known objective; in panic men shake with fear, act without aim or purpose, hear nothing. Disciplined men stay calm and steady, do their duty purposefully, and are attentive to orders and

instructions. The one is a state of mind just as is the other, and every state of mind grows out of the past. A myriad factors contribute to discipline—old habit, confidence in one's fellows, belief in the importance of one's duty.

—C. S. FORESTER



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By John F. Corso, State University of New York, Cortland

An experimental approach to sensory psychology, this volume is designed to lead the reader gradually into the substantive core of experimental sensory psychology, and then into general behavioral theories. Utilizing a selective and in-depth rather than eclectic treatment of his subject matter, Professor Corso presents detailed material from the related disciplines which underlie the science of psychology and restricts the scope of topics in experimental psychology primarily to unifying concepts, research methodology, and sensory processes. Organized in four major parts, the book proceeds from specifics and classical problems to general theories of behavior in contemporary experimental psychology.

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Troubled Clinical Waters

Erasmus Hoch, Alan O. Ross, and C. L. Winder (Eds.)

Professional Preparation of Clinical Psychologists. Washington, D. C.: American Psychological Association, 1966. Pp. viii + 154.

Reviewed by DAVID SHAKOW and ARTHUR L. KOVACS

The first editor, Erasmus Hoch, is currently a member of the Department of Psychology at the University of Michigan. He came to this position after many years of work on professional matters in the APA Central Office. Alan O. Ross is the Chief Psychologist at the Pittsburgh Child Guidance Center. C. L. Winder, the third editor, after years of teaching at Stanford, USC and Michigan State, is now Dean of the College of Social Science at Michigan State University.

The first reviewer, David Shakow, is Senior Research Psychologist at the National Institute of Mental Health, where he is primarily concerned with research in schizophrenia. He has been active in training clinical psychologists and research in psychopathology and psychotherapy during a long period at Worcester State Hospital, University of Illinois School of Medicine, and University of Chicago. The second reviewer, Arthur L. Kovacs, is Co-Director of the Western Psychological Center. He has been involved in writing about psychotherapy and the problems of training in clinical psychology since receiving his PhD from the University of Michigan in 1958. He has also been active in the affairs of professional organizations and has just completed a term as California's representative on APA's Council of Representatives.

To a Sierra Club Member, the Report of the Chicago Conference unavoid-

ably recalls the current battle over the California redwoods. Despite the clearly disparate motivations behind these two enterprises the analogy remains apt because the pleasure principle is closely involved both in conservation and in clinical psychology training. Short range needs for profit and local livelihood or for psychological assistance vie with the longer lasting needs for re-creation, or for the full use of the personal resources of both the helped and the helpers.

On the more technical side, my thoughts take this dendrological turn because of the dominance in this Report (as well as in all previous reports on clinical training) of the "scientist-professional" as the goal of training. This notion, most explicitly formulated in the 1947 Committee on Training in Clinical Psychology Report and developed further at the Boulder Conference in 1949, has a past that is, of course, longer than its history. It is an idea already implicit in the writings of William James and other "fathers."

WHAT gives such viability to the notion of the combined practitioner-investigator as the model of a clinical psychologist? Clearly there are pressures against it: from the "personality" researchers, who prefer the laboratory to field, clinic or consulting room, as well as from the "activists," who suffer

unless they provide instant response to society's crying needs.

I believe that this viability has many causes but derives basically from clinical psychologists recognizing that in the scientist-professional they have captured most adequately the underlying motivation—self-understanding through other-understanding by way of science—that led them to select psychology as a vocation. They see in the scientist-professional a person who, on the basis of systematic knowledge about persons obtained primarily in real life situations, has integrated this knowledge with psychological theory, and has then consistently maintained with regard to it the questioning attitude of the scientist. In this image he sees himself combining the idiographic and nomothetic approaches, both of which appeal to him.

A clearer definition of the scientist-professional perhaps comes from a deeper examination of the value systems that characterize him. They include a self-image of a psychologist identified both with his field and its history, and beyond that with science, whose major value Bronowski calls the "habit of truth." This habit expresses itself in the constant effort to guide his actions through inquiry into what is fact and verifiable, rather than acting on the basis of faith, wish, or precipitateness. Underlying and combined with this "hard-headedness" lies a sensitive, humanistic approach to the problems of persons and their societies. He recognizes the need for building for the future well-being of persons and groups on a solid base of knowledge. Thus integral to his attitude is an underlying modesty, the acceptance of the need for experiment and the long-term view. He emphasizes principles, not techniques, ends rather than means; he keeps as close as possible to real situa-

tions while approaching their study with as much rigor as possible. Although he recognizes the legitimacy of the psychonomist's approach to psychological problems through the use of more segmental and more controllable laboratory approaches, he, with dignity, insists on the importance of his own more molar approach. In this he exercises the utmost rigor compatible with maintaining the integrity of the situations he faces. The combination of the skilled acquisition of reality-based psychological understanding and the attitude of constant inquiry toward this knowledge is thus what defines the "scientist-professional."

SOME FORCES—social, personal and competitive—work against the full acceptance of this model. The social forces are of two major kinds. The first consists of the obvious social needs for service which the relatively short supply of psychologists makes even more pressing. This is compounded by the additional social pressure created by society's readiness to develop new and special institutions that offer almost unlimited opportunities for being at least minimally useful in meeting these needs. I refer to the programs described by Hobbs in his eloquent introductory address to the Conference. It is, however, not only the prerogative of a profession, but indeed its responsibility, to examine carefully, in the context of a sensitiveness to such needs, the ways in which it may *ultimately* be of the greatest service. A profession is not a "good profession" if it merely permits itself to be pushed around, even when this passivity results from the most laudable of purposes.

In addition to pressures that come from society, there are those that come from within psychology itself, through a form of exaggeration of the "scientific" contribution. This shows itself, for instance, in the notions of the more simplistic forms of behavior therapy—a "Look Ma, no cavities!" kind of approach. This "nonies" method only serves to denigrate the more complex and realistic involvement of the professional in his day-by-day efforts, for the implications are both that the diffi-

culty of professional clinical activity has been exaggerated and that almost anybody can do professional work.

Besides these difficult social and intra-professional pressures that confront clinical psychology, there are personal pressures. They present another order of difficulty because they call for a very special self-examination by psychologists, especially when the scientist-professional model has been seriously accepted. I refer, for example, to the temptations of private practice. Except in rare instances, it would seem that clinical psychology at its present stage of development must take a stand against the proliferation of private practitioners. This is so because such practice does not offer, except in the rare instance of a *most* unusual person or situation (in which case rules do not hold), the possibilities for making the kinds of contribution which we may reasonably expect from a scientist-professional, basic contributions which society needs so badly at present.

Rival models may at first seem to offer real competition to the prepotency of the scientist-professional model. On closer examination, however, this turns out not to be so. Certainly the "sub-clinical psychologist," as Fred Wells used to refer to him, does not provide any competition. The Chicago Report solves the problem with regard to the important group of the subdoctorally trained by suggesting that these technical workers should only carry professional responsibilities to the degree to which their personality, education, and experience make them competent. Other models that have been suggested may at best be included in the scientist-professional model. In some cases, they really are not models for clinical psychology, as the Report declares in its discussion of the psychotherapist model.

The scientist-professional model's strength lies in its basic appropriateness for a field such as psychology which is at an interface between science and the humanities. It also lies in its remarkable flexibility, since the truly fundamental value systems on which it is based can tolerate great diversity within its legitimate limits. In some respects, too, it offers an ideal opportunity for integrally

achieving the values of the scientist and humanist in actual practice, a combination which is so important for most branches of psychology, but which no specialties can realize by developing persons who only in parallel can be good psychologists and good citizens. (I believe I am not badly misreading history by emphasizing the *sempervirens* quality of the scientist-professional

ASIDE from the continued acceptance of the scientist-professional model, perhaps the strongest emphasis in the Report is on the psychological center. Although the Report nods slightly toward the need for "complementary" experience (p. 63), its acceptance of the center is overwhelmingly enthusiastic ["... full endorsement given by the Conference to the establishment of the psychological service center as an ideal setting for training" (p. 85)]. This response was apparently generated by the combination of Albee's ardent presentation of the arguments for such a center and the receptivity—indeed the marked affective readiness—of a great majority of the participants for what appeared to them to throw open the gates to independence. The proper response to this call for a center under the direct and full supervision of a clinical psychology program can only be "Let's try"

This provision of one setting for training which is completely under the psychologist's control has many attractive aspects. Whether such a system can be made to work should be tested to the limit. Its very establishment would offer a challenge to psychologists to make a center of this kind optimal for training. It should therefore only be made a responsibility of persons who are completely persuaded about its possibilities, persons who would do their utmost to make it successful. And if there are already existing operations of a high level of quality—I don't know of any—they should be given the fullest support to enable them to work at full capacity. However, even while accepting the need to experiment with any reasonable new proposal, we must examine its basic character and potentialities for training with great care. And since my own background has been quite different, I am perhaps in a position to sketch the other side of the picture.

My experience in evaluating training programs left me with the impression that psychological centers under department control used for training were "milquetoast" operations. They were not effective, except for limited purposes. This seemed so to me, because I saw them in the light of long experience in vital medical centers where training and research were closely interwoven into the fabric of a rich range of clinical operations. I believe that it will be a long time before psychological centers can truly reach acceptable levels for basic training, even if they do not ever reach the levels to which I refer. However, I am ready to be proved wrong and subject to conviction that these should be accepted as central training agencies.

Meanwhile we should face the facts and stop deluding ourselves. This self-deception takes two forms: the first concerns the quality of the operation we are setting up; the second involves the motivations for setting up such independent operations. We must not rationalize and accept shoddy quality in return for independence. In the final analysis, independence is not a cardinal value. Let us be honest, too, about the motives behind the drive for independence. Autonomy is a laudable—in fact, essential—ambition for any profession, so we need not be ashamed to indicate our wish for this openly. However, we must be certain that it is not the sheer power which comes with independence that we are really after.

More specifically, why am I rather negative about such centers? My observations of operations of this kind have, in general, indicated that they are limited in the range of clients, the significance of the problems represented, and the commitment of the clients. These difficulties are occasioned by both the absence of that force—illness—which drives persons to come to medical settings, and by the relatively limited resources of such centers for dealing with human problems. A fundamental rule which is basic to the establishment of good clinical training facilities is to set up an operation that meets a truly public need for service. Then one can build an effective training program on this base. If, on the other hand, one sets up the operation initially

and primarily for training, there is great doubt about its continued viability.

In the context of calling for the establishment of a psychological center, there is a concurrent tendency to underrate the medical center as a place for training. Aside from the independence aspect, which is based on a few real but, I believe, many unreal perceptions, what is usually offered for comparison is, unfortunately, some caricature of the "medical model." On the one hand, insufficient recognition is given to the strengths that still reside in the "disease" model. Its negative rather than its positive aspects tend to be emphasized. More importantly, what is not recognized is that a substantial part of the medical model is increasingly constituted of prophylactic, preventive, and public health aspects. This latter quality, the growing trend toward the humanization of medicine, and the introduction of increasing amounts of behavioral science into the medical curriculum provide an even worthier opponent for a purely educational model to contend with. (Cf. Cope and Zacharias, *Medical Education Reconsidered*, and Cope, *Man, Mind and Medicine*.) It is this newer medicine (and medicine is in the process of undergoing revolutionary changes which involves some extension into the educational model) that one ought to be thinking about, rather than the somewhat outmoded, purely pathological model.

In discussing the comparative richness of opportunities for training that the medical, as opposed to the psychological, center provides, I would like to comment particularly about their respective representation of disciplines. The psychological center calls for at best a variety of psychologists, with the "hopeful" representation of some other disciplines. But mainly it is conceived of as a group of psychologists, usually from one main area of psychology, working together. When one compares this with even the usual—let alone the optimal—medical setting, the representation of disciplines to which both teacher and the student are exposed is indeed meager. In the medical setting one has not only psychologist colleagues, but also representatives of many other disciplines, both medical and non-medical. I have written on a number of occasions about the immense resources of a good psychiatric hospital, so I shall not

dilate upon them on this occasion. The superior opportunities for broad and basic training in such practicum placements over those in even the best of psychological centers are striking.

In addition, many advantages derive from a situation where a variety of super-egos are represented. One check on the misjudgments that we all inevitably make in the complex clinical situation comes from the colleagues in one's own discipline. Another, quite different and perhaps more important, check comes from a person in a different discipline who approaches the same problem along his own road and by his own method. Such checks and counter-checks are particularly important in the uncertain clinical area. Further, the kind of learning that occurs when persons from different disciplines work together for a common goal is one of the most rewarding experiences I know of. And this is even more true for students from different disciplines when they receive overlapping parts of their training together, as well as have opportunities to mingle freely.

I find myself therefore taking a somewhat different point of view about the center in which clinical training should take place than does the Report. The Report recommends a "captive" institution for training so that its graduates, having acquired a proper identification with psychology, can practice anywhere. I suggest training at the best kind of institution—and for the present these are likely to be medical institutions—after which the graduates will be in a position to practice anywhere. The best medical institutions are those having representatives of various disciplines—representatives who have appropriate autonomy because those responsible are competent persons. For that reason I have never had any fears about the identifications psychology students adopt. I have rarely known it to fail: where a person is competent, he is not troubled by autonomy problems; in fact he may have difficulties in resisting attempts to give him unreasonably excessive autonomy.

We have already answered the fundamental question about the relative importance of quality and independence. Naturally, where both can be had, the ideal situation exists. But I hasten to add that the choice may in most cases be artificial. For I believe we can

achieve this autonomy, if we haven't already, in the quality institutions, even though they are medical institutions. (I will admit that I have known a few of these institutions of quality where for one reason or another such an achievement does not seem possible.) Above all we must face our problems honestly, making sure that we do not sacrifice public service for personal or professional power, that the independence we seek is independence in the service of the ego, not independence in the service of the id!

WHAT about other aspects of the Report? In general, the Report does not let us down. Many of the immediate training problems are dealt with more explicitly than in previous reports. This is to be expected, since we have had about twenty years of experience in which the problems have become more defined and our failings to meet agreed-upon goals have manifested themselves.

The Report makes a clear statement about the differences between postgraduate and postdoctoral training. Above all it not only emphasizes, as have previous reports, but emphasizes repeatedly three cardinal principles of clinical training—the integration of the academic and the practicum, the essential role of experienced clinicians as teachers, and the importance of research training and activity in appropriate clinical settings. It is also more explicit about the importance of psychologists working, in addition to remedy disorders, to maximize human potential. The clarity with which the group distinguished between the content of training and the nature of the subsequent practice (p. 68) is impressive. The closing reaffirmation of diversity in the context of a unified underlying model (p. 74) is particularly gratifying.

Some of the discussion about the "internship," however, is rather puzzling. The suggestion that this part of the practicum experience come earlier may result from an omission in the Report of any substantial recognition of the importance of clerkship experience. The Boulder Report outlined a clear progression of practicum experience—from

laboratory training in assessment devices, through clerkship experiences, to the internship experience. (I believe that the Conference slipped in not keeping to the Boulder Conference generic notion of practicum.) Under those circumstances there was no need for bringing the internship experience in earlier; indeed it seemed more reasonable to postpone it to later in the program. If the clerkship experience—the less intense yet wider involvement with clients—is not deemed an essential part of the practice training, then there might be some justification for having the internship earlier. But this seems to me to be a loss. I agree, on the other hand, with the reluctance of the group to accept the internship at the fourth year level, a step which would defeat the attempt to integrate the major field experience with the university experience.

Also puzzling is the statement (p. 52) that "the notion of a core curriculum is no longer viable." Is this a slip? The Report actually goes on immediately to consider areas that belong in the core curriculum. And, more than puzzlement, annoyance is generated by the occasional semantic beguilements which creep into the Report, such as "chunks of knowledge" and "areas of subject matter" for "core curriculum." These semanticisms lead to claims of a new approach to the problems of training.

IN comparing the Chicago Report with the Boulder Report, I must say that on the whole I find the earlier Report much more satisfying. (Is this because the clearer air of Boulder percolated through? Or is it my identification? Or can it be, after all, that I am objective?) The Boulder Report seems to be more complete and statesmanlike; more oriented to our own colleagues, to other professions and to the public; and more modest. In this Report, I detect a tinge of boastfulness or evangelism which the Boulder Report did not have. Such behavior is all right for a profession's boudoir, but isn't it better to keep it out of the ballroom?

My preference for the Boulder Report arises not only from its broader and more complete content, but also

from its organization. The format of the two reports are quite different. The Boulder Report is unified, almost 260 of its 270 pages being devoted to Conference material; whereas somewhat less than 60 of the Chicago Report's 150 pages are of this kind. Although practically all of "The Issues" material and the "Appendix" material is relevant, a greater feeling of unity would probably have been produced if the material in the former had been relegated to the appendix as well. As it is, one feels the need to try to organize "bits" into a whole. Another problem is the difficulty in easily finding the resolutions in the present Report, which in the Boulder Report were usefully indented. An index would also have helped.

In examining the list of participants, I am troubled by what I consider a serious omission. At this late date in the organization of planning conferences, should we be neglecting the students? I suggest the advisability of involving them in future conferences. Innumerable experiences have impressed me with, on the one hand, how often we tend to underestimate the capacity of students, and, on the other, the great contribution that students can make to the development of programs.

Let me present a few examples. In the evaluation visits made by the Committee on Training in Clinical Psychology members, some of the most potent suggestions and criticisms of programs came from the students at the universities visited. We always made it our business to interview a considerable number of students because we found their straight-forwardness and honesty refreshing, and their comments most helpful. When I was at the University of Illinois Medical School, we had, in addition to a faculty curriculum committee, a student curriculum committee. On occasion the faculty committee met with the student committee. The quality of the thinking and the recommendations made by the student committee were impressive. The students were frequently much more to the point than were the faculty. Not that the faculty committee was composed of old dodos. On the contrary, it had represented on it not merely the heads of the most progressive departments, but other faculty

members who were doing the most serious thinking about medical education. There is nothing like good intelligent consumers to tell you what's wrong with what you are assumedly giving them!

IN my remarks about the Chicago Conference I may appear to be violating sound therapeutic principles by being too evaluative, too judgmental. I would plead guilty if I considered at all that I was speaking as a therapist. On the contrary, because of my involvement with training, I identify with the patient or client. And one of the soundest principles for good prognosis for the patient, one which I believe all therapeutic schools would accept, is self- rather than projected blame.

The Conference had many productive aspects. It also provided a marvelous opportunity for group abreaction of the adolescent needs we all have, particularly those for independence. With some of this affect out, perhaps we can now more easily recognize that autonomy almost invariably comes with competence. Clinical psychology can now return to developing the most qualified, task-oriented clinical psychologists it can—clinical psychologists who recognize the immense needs of the field, a field in which there are many fellow-toilers from our own and other professions. Sometimes these persons work in overlapping areas; usually they have unique areas as well, in which they make their contributions. As competent professionals, clinical psychologists do not let themselves be pushed around either by society or by other professionals; neither do they do any pushing around themselves. While they do not settle for too little, their modesty, based on security, does not lead them to claim too much either.

As for the training programs themselves can we in the final analysis go beyond the rule of "the four goods": Have good teachers (models who are mature, sensitive, with clear value systems) give good students (with the same potential qualities) good training (truly "scientist-professional") in good settings (where they are exposed in-

tensively to a range of human problems, approached from a variety of standpoints)? Under such circumstances the "absence of excitement" in clinical programs about which the Report complains will vanish.

Reviewed by ARTHUR L. KOVACS

CLINICAL psychology has undergone a tremendous expansion and metamorphosis within the past decade. The events of my own life testify to the almost incredible revolution in patterns of theorizing, service activities, and social expectations which have gripped the clinical domain of the profession of psychology since I received my doctorate in 1958. Upon receipt of that precious degree my tumultuous journey began. I joined a group private practice (something almost unheard of in that year), feeling rather comfortable that I had completed a truly excellent training program in one of our nation's finest departments of psychology, a program which had furnished me with the necessary skills to think, to do research, and to carry out diagnostic evaluations and individual psychotherapy at the journeyman level, given some opportunity, of course, to consult with colleagues in the practice group. But what has happened to me since then! I have blundered into, engaged in, wrestled with, or somehow acquired the necessary tools to do a variety of things I never anticipated in graduate school. I now use not only the skills I was trained to employ in my pre-doctoral preparation but I am engaged in all of the following as well: group therapy with adults, with adolescents, and with married couples; family therapy; intensive weekend psychotherapy; sensitivity training; suicide prevention and crisis intervention; teaching a graduate practicum; supervising psychology interns; conducting a seminar for neophyte therapists designed to use the group process to resolve their (and my) counter-transference problems with patients; conducting a laboratory in personal growth for "normal" housewives; consulting with juvenile parole officers (at an experimental agency set up by my state) for the pur-

poses of teaching them the rudiments of psychotherapeutic skills, giving them increased insight into the personal and social genetics of the behavior disorders with which they must deal, and resolving chronic morale problems endemic in the agency; and finally, being active on the executive board of my state psychological association where I find myself enmeshed in legislative and bureaucratic concerns which touch the profession of clinical psychology and from which platform I have helped urge the American Psychological Association to recognize and deal creatively with the revolution I have so personally experienced. Just compiling this list is an exhausting task! And I know colleagues who do as many and as varied things as I do with very little overlap in our functions. I wonder if anyone who considers himself a clinical psychologist has any valid ideas about where any of us will be ten or twenty years hence!

IT is against this background, then, that any prospective reader must approach the recent conference report, for such convocations are historical events and can only be understood in historical contexts. It must be kept in mind that the present conference on the professional preparation of clinical psychologists represents the profession's third attempt since the end of World War II to seize hold of its own destiny. (I wish the editors of the present volume had seen fit to move the summary of earlier conferences, so ably presented by Lloyd and Newbrough, from the appendix to the introduction of the volume; this would have helped to orient the reader who is unfamiliar with the history of the issues involved.) And during the post-war period, psychologists have also met several times to consider the related problems of the entire scope of graduate education in psychology and issues in the training of counseling psychologists. From the first of these, the Boulder Conference of 1949, came the model of the clinical psychologist which was ostensibly to guide the programs of our graduate schools: to prepare a professional psychologist who possessed

the foundations for entry into the profession at the journeyman level and who would act at the same time as a contributor to the advancement of the science of psychology. This model has been affirmed and reaffirmed by every subsequent conference including the one being considered here. But whether most universities have ever done more than pay lip-service to its attainment is, I believe, a moot point and a painful point, causing great concern to large numbers of clinical psychologists.

In the years between the Miami Conference of 1958 and the present one, then, voices outside the university began to be heard crying out in increasing alarm about the failure of the universities not only to live up to their stated position, but to transcend it as well by adapting the preparation of clinical psychologists to the hopes of students, the realities of the community outside the cloister, and the creative challenge of the human revolution in society (cf., Pottharst and Kovacs, 1964). The substantive recommendations of previous conferences were subjected increasingly to indictment because of the obvious bias in the selection of representatives chosen to participate; of five conferences on graduate education in psychology held between 1949 and the present one, the percentages of participants who occupied sinecures in the universities already doing the training were 74%, 81%, 67%, 76% and 75%, respectively, and when participants from the training division of NIMH are included, the figures rise to 77%, 83%, 75%, 79% and 78% (figures adapted from tables on p. 123 of the report under consideration)! It made many clinicians furious that APA kept convening panels of persons already engaged in the training venture to rethink problems of training and that these individuals tended to congratulate themselves on the excellence of what they were already doing. Or they made proposals for modifications in programs that many not based in the universities felt to be ill-advised, regressive, out of touch with realities outside of academia, and painful mutilations of what were to a large extent already inadequate, shoddy, uninspired training efforts. Across the country

knots of clinicians active in its communities, in agencies or in practice, began to resolve that the projected conference to be held in 1965 could not be allowed to follow the same stale traditions of its predecessors.

IN 1964 a direct and stormy confrontation occurred. Spurred on by depressing gossip about the progress of the preparations for the conference emanating from APA Central Office and several rueful estimates of the low likelihood of any kind of meaningful conference eventuating therefrom proffered by several members high in the governance structure of APA, a rump group of clinicians worked day and night to prepare a plan for the conference which would have insured democratic representation at its sessions and a full airing of many of the controversial issues in the preparation of clinical psychologists. In a blatant, nasty political maneuver, the dissidents attempted to get the Division 12 Executive Board, meeting at the 1964 convention in Los Angeles, to adopt the substitute plan as the official conference plan. When the maneuver failed, an attempt was made to override the the Board by getting the plan ratified by the membership of the Division at its business meeting. Both tactics failed as most knowledgeable observers knew they must; but the resulting bitterness and confusion, the doubts and the name-calling produced a six-months delay in the opening of the conference, focused attention on the grievances, the hopes and expectations of segments of the profession, and the importance with which its successful realization was being viewed across the nation. Those mandated the responsibility for bringing the conference to fruition in the aftermath of the nastiness in Los Angeles earned universal respect by their subsequent diligence, the fairness, the open-mindedness of their effort and for the devotion with which they rededicated their energy. Every psychologist, then, owes himself the treat of reading the document which has resulted; the conference report is indeed a child of beauty born only after the most painful labor.

The recommendations contained in the report itself are too lengthy and detailed to summarize in this review nor is this review being written for a purpose. To give you some idea of the stage upon which the conference finally played itself out, however, I would like to touch on a few of the issues contained in the supporting documents which introduce and follow the report proper.

The then President of the American Psychological Association, Nicholas Hobbs, made a keynote address which, I believe, is a truly statesmanlike accounting of the various social forces impinging upon the profession. Dr. Hobbs, however, then went on to issue a more controversial call for changes in direction of training efforts. I call to move clinical psychology in directions of maximal social utility in helping all citizens to develop their full human potential. One of the points he stressed repeatedly was that the one-to-one talking relationship does not provide a sensible base for a helping profession. While there can be no quarrel with the economic sense of Hobbs's position, I believe he failed to recognize that training in and the later conduct of psychotherapy is an important tool that shapes the clinician as his own instrument and that sensitizes him not only to his own nature but immerses him in the total range of human experiences as does no other calling available in our society. Indeed, I wish that any professional person concerned about man in his world—the anthropologist, the architect, the novelist, the research psychologist—could have some continuing exposure to the drama that is psychotherapy.

Finally, I would also like to point out to prospective readers of the conference report the truly excellent overview of current training programs in clinical psychology prepared by Alexander and Basowitz. These authors capture and document in stark detail the serious shortcomings in our current training patterns: the denigration of clinical psychology by non-clinical faculty members, the relegation of clinical training to the youngest and least competent members of departments, the superficial nature of much clinical train-

ing which consists of "exposure" to various clinical skills without enough immersion to produce competence in any one of them, and the tendency to scorn prospective applicants' clinical interests or acumen in favor of selecting students with "research promise," to cite but a few examples.

The Conference Report proper, then, goes on to sound a clear call for the reformation of graduate education in clinical psychology. It demands to be read by all psychologists. Its principles and conclusions merit the serious attention of prospective and current students and all those engaged in the training effort. But more than anything, its proposals warrant the profound concern of the American Psychological Association. The day must not be put too far off in the future when our professional association takes upon itself more responsibility for accrediting training programs than has so far been its wont. If the Committee on Accreditation of APA's Education and Training Board would take the Conference's guidelines as a basis for giving or withholding accreditation to university training programs, then the 58 persons who labored so diligently in Chicago's heat will not have labored in well-intentioned impotence.

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I yield to no man in my belief in the principle of free debate. The sound of tireless voices is the price we pay for the right to hear the music of our own opinions. But there is also a moment at which democracy must prove its capacity to act. Every man has a right to be heard; but no man has the right to strangle democracy with a single set of vocal cords.

—ADLAI STEVENSON



A Twin is a Sibling

Helen L. Koch

Twins and Twin Relations. Chicago: The University of Chicago Press, 1966. Pp. xvi + 302. \$6.95.

Reviewed by BRIAN SUTTON-SMITH

The author, Helen Koch, received her PhD from the University of Chicago in 1921, and is now Professor Emeritus at the same institution. She is noted for her research on the social development of young children, particularly for her articles and monographs on the eight types of siblings in the two child family. She has served as President of Division 7, and her mother was a twin.

The reviewer, Brian Sutton-Smith, received his PhD from the University of New Zealand in 1954. He was formerly at Bowling Green State University in Ohio, and is now a Professor of Psychology at Teachers College, Columbia University. He is currently writing a book called The Sibling, and is himself an M2M.

IN 1927 Helen Koch published a study of "Some measurements of a pair of Siamese Twins," in the *Journal of Comparative Psychology*. Her present publication, therefore, can hardly be reckoned as a passing fad. It involves six groups of twins, monozygotic males (MZm), monozygotic females (MZf), dyzygotic same sex males (DZSSm), dyzygotic same sex females (DZSSf), and dyzygotic opposite sex males & females (DZOSm) (DZOSf). For a scholar who has already introduced into academic parlance the rubrics M1M, M1F, F1F, F1M, M2M, M2F, F2M, and F2F in order to cover the eight two-child birth order positions, the present set constitutes, at the very least, another set of labels with which we will all have to come to terms in due course.

Each of Koch's group of 30-40 twin subjects was between the ages of 5 and 7 years. They were the only members of their intact families (thus first-borns), not suffering from severe retardation, urban dwellers, attending public school, and, were therefore, a rather selected group of twins. Despite Koch's attempt to assure group equivalence, special factors were unavoidably influential for some of the subgroups. It was, for example, particularly difficult to obtain a sufficient supply of DZSSm apparently for a combination of reasons such as the higher death rate amongst male twins, the older age of DZ mothers, and the unwillingness of fraternal males to serve as subjects. Mothers, teachers, and children were interviewed; children were rated by the teachers and tested on intelligence and projective devices. For comparative purposes twins were matched with singletons from Koch's earlier studies of two-child family siblings.

In general, the study is systematic, carefully conducted, impressive, and disappointing. Koch had the alternatives of reviewing her data primarily in terms of the history of earlier studies and attitudes to twins (in which twins were used primarily as tools for genetic studies), or in terms of her own earlier pioneering work with two-child families. Despite her major interest in twin relations, she seems to have been forced into the former course. Apart from using subjects from her earlier sibling studies for controls, she ignores a unique opportunity of paralleling her present data with her earlier work.

To discuss first what she chose to do—and does well—rather than what she did not choose to do, many stereotypes that have been held about twins in the earlier literature are not sustained in her samples. For example, when compared with singleton controls, her twins were *not* rated as less sociable to adults, or less sociable to peers. Nor were they viewed as more rivalrous or egocentric. In fact, both MZ and DZ twins perceived their parents as more impartial than did their singleton controls, and they were also less defensive when talking about each other. They were not, in general, less adequate in speech at age six; and across the twin groups there were no consistent relationships between their degree of closeness and their speech adequacy. There is little evidence to support the view that the MZSS twins suffered speech handicaps because of their enforced closeness or their supposed isolation from others. In one sense Koch is here doing for twins what Hooker did for onlies in the late 1920's when the latter presented evidence to show that as compared with singletons, onlies were not especially spoiled or inadequate.

Koch's major finding, however, was that when prematurity was controlled (twins to controls = 7:1 on prematurity), most of the observed differences across twin types and between twins and singletons simply disappeared. "Prematurity and its antecedents and sequelae may be the major determinants of the unique qualities of twin types" (p. 182).

LET me turn now to what was disappointing to this reviewer, namely, that Koch did not choose to seek parallels between her earlier work on siblings and her present work with twins. Let it be conceded that given the importance of prematurity as an explanation for most of the findings, the disappointment must be the reviewer's rather than Koch's responsibility. In earlier work with two-child family members, Koch demonstrated most clearly that in dealing with sibling relationships, most effects are of an interactive nature, and that it is necessary to take into account

birth position, sex and age spacing together, not just separately. Although her data on siblings were published as early as 1954, most of the subsequent experimental literature involving birth order variables and deriving from social comparison theory after Schachter in 1959 (some 25 experimental studies by this reviewer's count) has been conducted without any regard for her findings whatsoever. Undoubtedly, some of the contradictory results in that literature derive from this neglect. But let's return to the possible parallels between her own two studies that she does not deal with.

An immediate parallel is that between the same sex twins in this study and the same sex close spacing siblings in the earlier work. Koch finds, for example, that the same sex boy twins (MZ or DZ) seem to be less adequate in almost every way than the equivalent girl twins. While the former are retarded physically, in verbal performance, and in speech behavior, the latter are actually advanced on performance tests and in speech behavior. The girls are made more feminine by each other, but the boys are not made more masculine. This finding parallels Koch's sibling data in which the same sex siblings at the close spacing had a positive effect upon each other if they were girls and a negative effect if they were boys. While there is no ready explanation for this parallel, what might be occurring is that at the close spacing there is a mutual dependency which facilitates the development of traits congruent with feminine sex role expectations, but hinders the development of masculine sex role traits. In the sibling situation, independence seems to be facilitated by a greater separation of the males from each other, as at the over two years age spacings.

Again, Koch records that opposite sex twins were both more rivalrous and more stimulating to each other than same sex twins. While the girl was usually the dominant one, the boys were more ambitious and of wider interests than their counterparts, the DZSSm. In her sibling data, Koch also found that opposite sex siblings at the closer spacings were both more anxiety inducing and stimulating to each other.

A mild degree of identity stress apparently makes for a more alert personality.

There are other parallels between present and her earlier studies, and the importance of finding them has to do with the fact that while there is no paucity of structural theories about family interactions (Parsons, Levi-Strauss), there is very little good evidence of the sort that Koch has applied in such abundance.

Research Strategy

Benton J. Underwood

Experimental Psychology. 2nd Ed.
New York: Appleton-Century-Crofts, 1966. Pp. ix + 678. \$2.50.

Reviewed by CHARLES G. MORRIS

The author, Benton J. Underwood, whose 1942 PhD was from the University of Iowa, has, since 1946, taught introductory experimental psychology at Northwestern University where he is now Professor. He is the foremost researcher in verbal learning today, and this book represents his conception of what the introductory experimental course should be. He is author of *Experimental Psychology*, 1st Ed. 1949, and of *Psychological Research*.

The reviewer, Charles G. Morris, received a PhD from the University of Illinois in 1965, specializing in personality and developmental psychology. His particular interests are in undergraduate teaching with major concentration in social psychology. At present he is an assistant professor in the Department of Psychology at the University of Michigan where his primary responsibility is supervision and training of ten graduate teaching fellows in the "Elementary Laboratory" course which is elected by 500 prospective psychology

majors each year! He says he's a hybrid psychologist in the experimental-social tradition who fancies himself, in desperation, a general psychologist.

THIS is the third volume in Underwood's continuing effort to provide aspiring undergraduate psychologists with an introduction to methods and procedures in psychological research. By way of orientation, "experimental psychology" refers not to a content area within psychology, but rather to a research strategy which, in its simplest form, requires the manipulation of at least two treatment conditions. One major theme in the present book is that the experimental method is "... the most efficient and most nearly foolproof procedure we have..." for determining cause-effect relationships (page 9). A second and related theme is that "... growth of an experimental discipline occurs as a result of breaking gross phenomena into parts for independent study" (page 259).

For those who object *a priori* to one or both of these principles, there is a third: the "ultimate test" of the validity of an argument is recourse to evidence. Appropriately, the body of the text consists in a series of demonstrations that in fact experimental analysis coupled with the experimental method is a productive research strategy, at least in the more traditional content areas of experimental psychology.

That this research strategy is equally productive in personality, developmental, or social psychology is not discussed since Underwood's concern is not with demonstrating the universality of the method. Rather, his concern is with presenting an astatistical development of relatively specific research designs and procedures. In this respect, the present volume is unparalleled in its sophistication and rigor. Nonetheless, many readers will experience increasing disaffection as the book progresses, since attention becomes centered on minute procedural details instead of more basic research issues. For example, 24 pages are devoted to manipulations of intra- and inter-list similarity in studies of transfer in verbal learning. In contrast, only three pages are given to the appropriateness of animals for

psychological research, and this discussion is limited to learning experiments. Experimenter effects are introduced as being of importance, but they are dealt with superficially in a short paragraph. Particularly disappointing is the lack of response to those who hold that data pooled across several Ss are inappropriate in psychological research. This is, indeed, "... a point of view with considerable force in experimental studies of learning today" (page 360). Since the pooled-data approach is implicit in the present volume, it is difficult to be satisfied with the not-very-illuminating observation that "we all have the same long-term objective..." but the strategies used in reaching the objective differ" (page 360). Nothing more is said! No attention is given to the possibility that the strategies are appropriate for different research questions, or that they perhaps lead to different kinds of conclusions. It would seem that such basic issues as these deserve greater attention, even if at the cost of some of the more specific, detailed procedural material which is included in the book.

As in the first edition, there is no attempt to review the literature of experimental psychology. Rather, "experimental illustrations" are selected which are particularly appropriate in clarifying some design or procedure and which can be studied meaningfully with little equipment. Together, these criteria result in a narrower breadth of coverage than that in the first edition. From the potential topics which remain, illustrations are arbitrarily selected with a resulting emphasis on learning studies (particularly verbal learning) published between 1962 and 1964.

Although the primary objective of the book is research design and procedure, this material is arranged almost entirely around the (illustrative) research topics. On first reading, the discussion flows easily and continuously in this format. However, recovering the methodological content is difficult. Consider, for example, that experimental analysis is discussed in three separate chapters as it arises more or less naturally. The index lists part of the

discussion under "component analysis" and the rest under "analysis versus synthesis." An excellent discussion of independent groups *vs.* within-S designs is contained largely in a separate chapter near the beginning of the book. However, the concluding eight-page discussion is sandwiched into a chapter on verbal learning 300 pages farther on.

Underwood tightly interweaves research illustrations and methodology, the result being an intricate pattern in which the one fully complements the other. For those with substantive interests in perception, psychophysics, reaction time, problem solving, and learning, it is difficult to imagine a more appropriate or masterfully executed text. For the general reader, the first half of the book should be required reading. For persons of either persuasion who are looking for a rigorous introduction to research design geared to the undergraduate level, but one which is broad in its appeal, keep looking—or writing, as the case may be!

Making the First Course Interesting

Jack Vernon

Inside the Black Room: Studies of Sensory Deprivation. New York: Clarkson N. Potter, 1964. Pp. xvii + 203. \$4.50.

Reviewed by DANIEL LANDIS

The author, Jack Vernon, received his PhD working with Frank Geldard at the University of Virginia in 1952. He immediately went to Princeton where he rose through the ranks to Professor wearing out, he says, five chairmen along the way. He resigned in 1966 to become Professor and Director of Re-

search in the Department of Otolaryngology at the University of Oregon Medical School in Portland, where he is now concentrating on research in audition. He is also the editor of *Self-Selection Text in Introductory Psychology* (W. C. Brown, 1966).

The reviewer, Daniel Landis, received his PhD under Charles Solley and Ross Stagner from Wayne State University in 1963. Since moving out of academia to the Franklin Institute in 1964, he has been conducting studies in perception, education, the effects of educational and economic deprivation on development, and all manner of things that interest him. He is currently Senior Research Psychologist and Director of the Center for the Study of the Social Impacts of Technology and Science at Franklin Institute.

ALTHOUGH this is not a new book (having been originally issued in 1963), the American publisher has carefully kept it a secret (they have yet to provide this reviewer with a copy). The book has been reissued in paperback but this edition is not for sale in the United States or Canada (this review is based upon the British Edition). I find this state of affairs sad since I feel this book could be used with profit as a supplement to a beginning psychology course.

To this reviewer, a book to be used in a first course should meet four criteria: it should describe an interesting area of research; the author should not have too terribly high an opinion of himself; it should give the student some idea of how research is actually carried out (in contrast to the way researchers often say they carry out research); and, finally, it should be written with wit. Few books meet these criteria. Bachrach's *Psychological Research* is one; Hebb's *A Textbook of Psychology* is another. But neither of these books describes a single area of research. On the other hand, Vernon's book does meet all the requirements.

First of all, the conceptualization of what happens when we are isolated from sensory stimulation has a certain intrinsic fascination to most of us. Leaving aside possible clinical explanations it is not hard for the reader to

conjure up pictures of astronauts doing strange things when confined to outer space for long periods of time. Movies (mostly bad) have been made, and the Office of Naval Research has sponsored many studies (some not so bad) on the phenomenon. So, the area is *prima facie* interesting.

Secondly, Professor Vernon is not afraid to mention the blind alleys he blundered into or even the mistakes that were made. He writes as a modest scientist giving generous credit to his students (John Hoffman) even though the scope of the book gives him little reason to be self-effacing. The main point here is that he is not afraid to accept the responsibility for being in error.

THIRDLY, Vernon seems to follow the research dictum of "let's see what happens." When he started the studies which are reported, the McGill work was new. Very little was really known about sensory deprivation, so almost anything one did was bound to be of value. Vernon's basic research orientation inevitably demands that he let the reader in on the reasons for pursuing each experiment. Often, a study was generated for no other reason than that the data of a previous study appeared strange. By letting us follow the experimenter's thought processes, Vernon makes the research endeavor comprehensible.

Wit in professional writing is usually used in one of three ways. There is the very obvious hilarity included by a Harry Harlow administering a "Sermon on the Mount." Secondly, there is the straight-faced satire of Bogardus when he offers some "Sidesteps to a Non-specific Theory." Finally, there are the low-keyed asides which derive from the data, the experimenter, or the experimental situations. Hebb uses this method well and Professor Vernon seems clearly in this category. For example, the author describes in great detail how one subject constructed on elaborate clock based upon a pendulum and his own heart beat. This amazingly accurate apparatus was constructed entirely in the dark. The fact, also, that a few subjects came out of the Black

Room with cured colds, is a rather amusing and curious phenomenon.

Finally, this book does provide, through focusing on a single series of studies, a fairly complete synopsis of our current knowledge of sensory deprivation. The topics covered read like a first course in miniature: dreams, time, learning (both simple and complex), reaction-time, hallucinations (visual and auditory), motor co-ordination, and individual differences. If we hope to inspire our students to research careers, I would think Vernon's book should be high on the required reading list, if a copy can be obtained without breaking customs regulations.

Deglamorizing Divergent Responders

Liam Hudson

Contrary Imaginations: A Psychological Study of the Young Student. New York: Schocken Books, 1966. Pp. 181. \$4.95.

Reviewed by JULIAN STANLEY

The author, Liam Hudson, has a PhD from Cambridge University (1961) and is Director, Research Unit on Intellectual Development, Research Center, Kings College, Cambridge University.

The reviewer, Julian C. Stanley, received his doctorate from Harvard in 1950 and for more than twenty years has been especially concerned with quantitative aspects of educational psychology, particularly in the design and analysis of experiments and psychometric test theory. In this enterprise he founded a Laboratory of Experimental Design at the University of Wisconsin and was its Director until 1967. He spent the last two years as an NIMH Special Fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford. Currently, he is Professor of Education and Psychology at The Johns

INFANCY AND EARLY CHILDHOOD

A Handbook and Guide to Human Development

Edited, with an Introduction, by Yvonne Brackbill, *University of Denver*

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development, etc. In the introduction, Professor Brackbill outlines the history of the scientific study of infant behavior. Comprehensive bibliographies follow each chapter.

1967 533 pages \$9.95

BEHAVIOR IN INFANCY AND EARLY CHILDHOOD

A Book of Readings

Edited by Yvonne Brackbill, *University of Denver*, and George G. Thompson, *The Ohio State University*

"... well balanced, with articles chosen carefully. ... appealing to anyone trying to obtain a complete view of the writings in the field. Almost all the classic studies are included, as well as some newer studies that ... will be classics in the future (i.e.

Fantz on 'Pattern Vision in Young Infants' and O. K. Moore and his work with the talking typewriters). ... The hard work shows in the quality of the finished product."—*Childhood Education*

1967 713 pages \$9.95

IDENTITY AND ANXIETY

Survival of the Person in Mass Society

Edited by Maurice Stein, *Brandeis University*, Arthur J. Vidich, *The New School for Social Research*, and David Manning White, *Boston University*

Identity and Anxiety contains "a number of papers by authors who observe and study human behaviour from the points of view of many disciplines ... stimulating reading. ... Under the title 'The Dissolution of Identities' are offered what may be the most significant, if frightening, harbingers of our age. Lif-

ton's paper on 'Methods of Forceful Indoctrination' and Meerloo's 'Brainwashing and Menticide' report on phenomena which motivated Huxley to write *Brave New World Revisited*."—*The International Journal of Social Psychiatry*

1960 658 pages paper, \$4.95

THE COUNSELING OF COLLEGE STUDENTS

Function, Practice, and Technique

Edited by Max Siegel, *Brooklyn College*

Foreword by Harry D. Gideonse

Original contributions by 18 authorities in the field approach college counseling from a practical point of view. Chapters range from the history of college counseling and the personality of the college student to such specialized services as counseling the physi-

cally handicapped, career and mental health counseling, and religious counseling. Focusing on function, practice, and technique, the book covers, in depth, all significant aspects of student counseling.

1968 487 pages \$9.95

THE STUDY OF POLICY FORMATION

Edited by Raymond A. Bauer, *Harvard University*, and Kenneth J. Gergen, *Swarthmore College*

Foreword by Robert C. Wood

Professors Bauer and Gergen have made a major contribution to the study of a complex social process—policy formation—by bringing together nine empirically oriented, previously unpublished papers. Contributors include Enid Curtis Bok Schoettle, Richard Zeckhauser, and Lewis M. Schneider. The selections

show how intellectual developments in the areas of decision-making, power structure, and formal organizations lend themselves to study in the field of policy making, pointing out present limitations and signaling areas where additional knowledge is needed.

May, 1968 approx. 416 pages \$9.95

READINGS IN REFERENCE GROUP THEORY AND RESEARCH

Edited, with an Introduction, by Herbert Hyman and Eleanor Singer, both of *Columbia University*

Tracing the development of the reference group concept from its inception to the present, this collection of 34 readings is the first volume to review and summarize 25 years of research and literature on the subject. The diverse selections include portions of *The Psychology of Status*, in which the reference group

concept was first presented in depth, as well as readings drawn from the work of Robert K. Merton, Muzafer Sherif, W. W. Charters, Theodore M. Newcomb, Ruth Hartley, Stanley Schachter, Seymour Parker, S. N. Eisenstadt, Heinz Eulau, and others.

1968 520 pages \$10.95

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Hopkins University. He has a recent book, *Improving Experimental Design and Statistical Analysis*.

PSYCHOLOGISTS have a penchant for appropriating from the vernacular words such as "intelligence" and "creativity" that are hoary with accretion of various connotations across the centuries and trying to use them in a more limited technical sense. Many such words have either predominantly positive or negative valences for the layman; no one wants to be considered unintelligent, and mention of creativity conjures up thoughts of Edison, Einstein, and Da Vinci. Attempts to avoid such slippage, as with Goddard's coining of the word "moron," are not always successful. We envy the biologist his gene and virus, the physicist his entropy, and the chemist his specialized nomenclature for compounds that tends to be neutral affectively (even a catastrophe such as that involving thalidomide does not usually strike verbally at the basic nomenclature, but at a trade or shortened generic term).

When psychologists study the number and types of uses that children list for a brick and call this "creativity," they set a trap for themselves as well as for non-psychologists. The author of *Contrary Imaginations* avoids such snares by showing the complexity of the divergent-convergent classification and its concomitants. He finds that male students in academically selective English high schools who give many responses to open-ended items but relatively few correct responses to an intelligence test tend to be and remain arts majors, whereas those who give few responses to open-ended items but excel on single-answer intelligence-test items tend to be science majors.

The separation in his group is rather striking. Some of the academically ablest, cleverest, and most inventive future scientists list astonishingly few uses for common objects, and yet they go on to the best English universities to distinguish themselves. His analysis of this seeming paradox goes well beyond the simplistic 'you're creative only if you're a diverger' thinking that has characterized many studies in this area.

Hudson's approach is heuristic, based initially on his testing and follow-up of 200 or so boys each year for five years, assessing statistical significance where appropriate but also leaning heavily on refreshingly undogmatic speculation. He considers in some detail the relationship of his research to that of Getzels and Jackson, MacKinnon, Roe, and others, cautiously employing psychoanalytic notions frequently. Psychologists will probably be divided in their reactions to the speculative portions of the book, perhaps along the diverger-converger continuum. Hudson himself seems admirably able to present multiple working hypotheses, as Chamberlin (reprinted in *Science*, 1965, 148, 754-759) urged long ago, rather than trying to zero in immediately on a single explanation for a given finding. His use of both statistical procedures and psychoanalysis smoothly seems to point him up as what he would call a highly converging and diverging "all-rounder." I suspect that all-rounder readers will find his book fascinating and palatable, whereas persons leaning strongly one way or the other will feel uncomfortable with different parts of it. In other terms, Hudson's treatment seems a bit too tough-minded for the tender-minded and too tender-minded for the tough-minded, leaving as its best potential audience the 'middle-minded,' but dichotomies of this sort cannot capture its essence.

THREE cautions and a suggestion seem in order. Hudson's empirical work has been with high-ability boys enrolled in selective English schools, who may differ appreciably in various ways from high-ability boys in U. S. secondary schools.

Secondly, he used as his intelligence test the A.H.5, which consists of verbal, numerical, and diagrammatic components and may be measuring a rather different composite of abilities from many of the intelligence tests used in the United States. For example, on page 156 he states that a vocabulary test distinguished at the .001 level of significance between 62 "scholars and exhibitioners" at Oxford and Cambridge and the remaining 313 men at Oxford, Cambridge, other universities, or no uni-

versity, whereas none of his other measures, including each part of A.H.5, did.

Thirdly, his procedure for defining convergers versus divergers guarantees that the former have higher A.H.5 IQ's than the latter, so if sciences rely on the average, better intellectual ability than non-sciences some of his findings about science majors as convergers versus arts majors as divergers may be partly artifactual. On page 160 he mentions the bias but does not explore this possible implication. As usual, typological comparison of low-high and high-low scorers is fraught with difficulty.

Hudson cites a 1962 publication by Crutchfield. It may be well here to call your attention to a more recent presentation of Crutchfield's views about how to strengthen what he calls a "master thinking skill": Richard S. Crutchfield, "Creative thinking in children: its teaching and testing," pages 33-64 in *Intelligence: Perspectives 1965*, Harcourt, Brace & World, 1966. Crutchfield's chapter makes an excellent contrasting sequel to Hudson's book.

In his chapter on "Rival Systems of Defence" Hudson argues persuasively, analyzing boys' autobiographical scripts, "that all schoolboys are, in some sense or other, 'defended.' Throughout the American Literature on 'creativity,' the diverger (or his equivalent) is seen as emotionally 'open,' the converger as defensive or 'closed.' I wish to argue that both are defended; that convergers and divergers differ, not in being defended or open, but simply in the defensive style or policy which they employ" (p. 76).

Bringing the complexity of human beings back to both convergers and divergers without pejorative overtones for the former or eulogies for the latter may be the highlight of this stimulating book. Few psychologists and educationists can afford not to read the entire volume carefully for its insights and research suggestions. Fortunately, most readers will find this a decidedly pleasant undertaking.



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Pick a Number

Raymond A. Bauer (Ed.)

Social Indicators. Cambridge, Mass.: M.I.T. Press, 1966. Pp. xxi + 357.
\$10.00.

Oskar Morgenstern

On the Accuracy of Economic Observations. 2nd Ed. Princeton, N. J.: Princeton University Press, 1963. Pp. xiv + 322. \$2.95.

Reviewed by LEE SECHREST

Both Raymond Bauer and Oskar Morgenstern are identified in the review. In addition, Bauer is author with Alex Inkeles of *The Soviet Citizen*, and author of *Nine Soviet Portraits and The New Man in Soviet Psychology*. Morgenstern is Director of the Econometric Research Program at Princeton and author with von Neumann of *Theory of Games and Economic Behavior*, and author of *International Financial Transactions and Business Cycles*.

The reviewer, Lee Sechrest, is a newly anointed Professor of Psychology at Northwestern University where he has been for nine years, except for a year in Hawaii and in the Philippines pursuing cross-cultural research and other pleasures. He will be off again to the Philippines for 1968-69. He has worked for several years on problems of assessing behavior and social processes through indicators and, above all, on Unobtrusive Measures, of which he is one of four authors (CP, 1967, 12, 407). He is co-author with A. P. Goldstein and K. Heller of *Psychotherapy and the Psychology of Behavior Change*, and with John Wallace, of *Psychology and Human Problems*.

WITHOUT some thought neither Morgenstern's nor Bauer's book would seem to have much relevance to psychologists. However, for those social scientists who are interested in charting the course, both past and future, of

society and its organizations, these books are nearly essential. Fortunately, unlike many other "nearly essential" works, they are also greatly interesting and refreshing. After reading them one feels capable of an informed skepticism regarding many important matters which are taken for granted by all but a few. Both books deal with the question of how we know what the status of an organization, e.g., a political entity, is at a given moment, and conclude with estimations of our ignorance. Unfortunately our ignorance is itself little known, but its implications are vast.

Professor Morgenstern may be known to many psychologists as the collaborator of Von Neumann in work on game theory, and he is still a professor in economics at Princeton. His book was originally published in 1950, but fortunately the task of revising and updating it was compelling, and we now have the second edition. Bauer is Professor of Business Administration at Harvard and is known by many psychologists for his work on the psychology of the Soviet citizen. *Social Indicators* is edited by Bauer with an introductory chapter by him and other chapters by Albert Bideman, Bertram Gross, and a joint chapter by Robert A. Rosenthal and Robert S. Weiss.

MORGENSTERN's book is a thorough-going inquiry into the reliability and

validity of indicators of economic change, and while that might seem a bit remote from psychology, his analysis is acute and clearly is general in its implications. He considers the sources of data and sources of error in economic statistics, pointing out among other things that most such statistics are by-products of some other process. He also considers the relationship between data and theory and data and decision making and then proceeds to analysis of specific problems in such fields as foreign trade, mining, national income, and growth statistics.

The central theme of Morgenstern's book is that many, perhaps all, of our societal and national statistics, let alone statistics on other societies, are of disastrously poor quality, and that, even worse, the degree of inadequacy is either unrecognized, unadmitted, or unknown. That may not be exactly news, but there are probably very few psychologists who have taken the effort necessary to think through the magnitude of the problem and the even greater magnitude of its implications. Lest it be thought that Morgenstern is a finicky critic flaying a dead horse, it is worth pointing out (1) that he displays a complete understanding of the inevitability of error without dismissing it as of no importance, and (2) that every day the national government, the news media, and many citizens give ample evidence of their lack of knowledge of the very errors to which Morgenstern refers. Some of Morgenstern's observations about the use of statistical indicators are amusing, some are enlightening, and some are devastating. And some of the problems to which he points are well known, some are worth demonstrating, and some are startling. For example, Morgenstern deals forthrightly with the question of degree of implied error in such statistics as that on June 30, 1962, the national debt was \$286,330,760,848. The implied proportion of error, that last digit, is 10^{-11} whereas one of the most precise physical measurements, the speed of light, is measured with an accuracy of only 10^{-8} . Morgenstern points out that most of our theories, economic or social, permit only the most general predictions, and that spurious accuracy in reporting

decimals will not retrieve our theories. One is reminded of the psychologist's habit of predicting and hoping merely for a correlation significantly different from zero and then reporting the result to three decimals and the probability level to five if warranted.

Morgenstern reveals that estimates of the values of many social indicators take years to settle down and that the size of revisions of initial estimates are far larger than the short term changes. For example, estimates of national income are sometimes revised as long as ten years after initial publication, and the revisions are occasionally sizeable. Yet important economic decisions are constantly being made on the basis of changes of the magnitude of .1% in such statistics. Level of employment, balance of trade, gross national product, and stock market performance are examples of areas in which there are short-term, perhaps even daily, reports calculated to levels of implied accuracy which are specious, misleading, erroneous and upon which critical decisions are based. Morgenstern's fascinating book has no final solutions to offer, but it is clear that greater honesty and greater understanding are called for.

BAUER's book grew out of a concern for the effect of NASA programs on American society. However, when it came time to examine the possible impact of space explorations on society, it became evident to Bauer and his insightful colleagues that there was no way of assessing impact either because available indicators were hopelessly inadequate or because no indicators were available at all. To quote Bauer's estimate of the situation, "For many of the important topics on which social critics blithely pass judgment, and on which policies are made, there are no yardsticks by which to know if things are getting better or worse" (p. 20). Biderman, in his chapter, examines the report of the President's Commission on National Goals made in 1960 and finds that for only 59% of the explicit goal statements is there any apparent indicator for the goal. Moreover, Bauer and his associates believe that the lack of indicators is not merely a problem

of ignorance of performance. There is reason to believe that development efforts will be concentrated in areas in which indicators, no matter of what quality, exist. Thus the lack of indicators operates to shape goals.

In his two chapters Biderman makes some specific suggestions about improving indicators, particularly in the area of indicator availability. One suggestion he makes which should interest many psychologists greatly is that standby research capacity should be developed to make it possible to begin nearly instantaneous research on novel but critical events, e.g., unexpected scientific achievements, political assassinations; natural disasters. Gross presents an excellent analysis of various models and problems in what he calls "social systems accounting." Many evident problems in estimating social change could be obviated or resolved through attention to the scheme developed by Gross. Finally, Rosenthal and Weiss consider the place of feedback in organizations, but their discussion is quite general and so good that it deserves the wide attention of social psychologists. After reading their chapter one could scarcely again make the thoughtless, naive recommendation that an organization would surely improve with more feedback.

Neither of the books reviewed here is likely to occupy a central place on many psychologists' bookshelves, but both of them deserve to be read by all psychologists who are interested in social development and change, and their general arguments should be familiar to all well-informed citizens.



To know from elderly people how to remain young in spirit and in physical readiness, not for simple foolish ambition or vainglory, but to demonstrate that next to physical decline exists an intellectual youth, which in its strength challenges matter and asserts the true force and the true prestige of the old.

(Translated from Italian)

—G. TRIPI



Psychoendocrinology?

Luciano Martini and William F. Ganong (Eds.)

Neuroendocrinology. New York: Academic Press. Vol. I (1966). Pp. v + 774. \$32.00. Vol. II (1967). Pp. v + 777. \$32.00.

Reviewed by SEYMOUR LEVINE

The first editor, Luciano Martini, MD, is Professor of Pharmacology, Università Degli Studi, Milan. He was a joint editor of Hormonal Steroids: Biochemistry, Pharmacology and Therapeutics: Proceedings of the First and Second International Conferences on Hormonal Steroids, Milan, 1962 and 1966. The second editor, William Ganong, is Professor of Physiology at the University of California Medical School, San Francisco. He received his MD from Harvard in 1949.

The reviewer, Seymour Levine, is Associate Professor of Psychiatry at Stanford University School of Medicine, where he has been since 1962. For two previous years he was a fellow of the Foundations Fund for Research in Psychiatry in the Department of Neuroendocrinology at Maudsley Hospital, in the London Institute of Psychiatry. He received a 1952 PhD from NYU, and his chief research area is hormones and behavior with emphasis on developmental parameters related to later endocrine function.

THESE VOLUMES admirably succeed in their main purpose. They set out to be a comprehensive review of many aspects of the field of neuroendocrinology. The distinguished group of contributors have produced an over-all excellence in the quality of the chapters dealing with the problem of neural regulation of endocrine function. As in most edited volumes, there is unevenness among the chapters, but in general they offer a great deal of information.

Unfortunately the volumes fail to accomplish one of their stated purposes. Thus, although we are led to believe in the introduction that some emphasis is to be placed on the effects of hor-

mones on behavior, there is little in the first volume that could recommend it for a general psychological audience. When one examines the first volume of the two, there are only three references to behavior and these appear cursorily in one chapter only. The second volume does contain material which is more directly concerned with hormonal influences on behavior. However, those chapters which discuss hormone behavior relationships deal exclusively with the hormonal regulation of sex behavior. In fairness, it should be noted that the best evidence of the effects of hormones on behavior is available for sexual behavior, and that other behavioral parameters which have more recently shown to be influenced by hormones have not been nearly as well documented.

In addition to the very limited amount of material dealing directly with behavior, the readership of these volumes among psychologists is further restricted by other considerations. A critical reading of these works depends upon the reader's knowledge of basic biochemistry, endocrinology and neuroanatomy. The chapters are written at a very high level, assuming a working knowledge of these disciplines.

THE growth and development of any area of research is to a large extent dependent upon the availability of techniques for implementation of one's research ideas. Neurophysiological and neurochemical techniques are readily available and although by no means simple, have been mastered and effectively used by many psychologists. The standardization of methods and techniques used in neuroendocrinology has developed more slowly due to the relative newness of the discipline. Many accurate procedures for hormone determinations and manipulations of neuroendocrine systems are now available. These works reference many of these procedures and are useful in this regard.

It is with regret that this reviewer views the shortcomings of these volumes for a psychological audience. There now exists a body of experimental information which indicates that hormones play a role in the regulation of

sex behavior, aggressive behavior, avoidance conditioning, and discrimination learning. The recent textbooks in physiological psychology, in general, deal inadequately with the problems of endocrine and behavior relationships. The influence of hormones as a determinant of behavior has taken a very subservient place in physiological psychology as compared to the number of studies using the methods and concepts of neurophysiology and neurochemistry. It is the assumption of most psychologists that an understanding of behavior must in some way involve the central nervous system. The basic concepts of neuroendocrinology which emphasize the role of the central nervous system on endocrine regulation and the effect of endocrines on the central nervous system make possible a conceptual framework in which hormone-behavior relationships can be viewed within the perspective of the central nervous system. The nature of the interaction between hormones and the brain provides some preliminary basis for understanding how hormones modulate behavior and, conversely, how behavioral states can affect endocrine function.

It is of interest that the behavioral processes which appear to be modulated by neuroendocrine mechanisms are those which have long been a concern of clinical psychology and personality theory. An understanding of the biological bases of sexual and aggressive behavior and behavior under aversive control does require a knowledge of the basic principles of neuroendocrinology and should be made available for a broad psychological audience.

Unfortunately, by achieving the level of excellence in a book intended principally for physiologists, its value is limited to but a few specially trained psychologists.



Decisive actions are often taken in a moment and without any conscious deliverance from the rational parts of man.

—ROBERT LOUIS STEVENSON



Conferences, The Russian Novel, Operations Research, and the Social Sciences

J. R. Lawrence (Ed.)

Operational Research and the Social Sciences. London: Tavistock, 1966. Distributed in the US by Barnes & Noble. Pp. xxxiv + 669. \$20.00.

Reviewed by MARTIN SHUBIK

The editor, J. R. Lawrence, is Operational Research Group Manager, Imperial Chemical Industries, Ltd., Paints Division and Honorary Editor, The Operational Research Quarterly.

The reviewer, Martin Shubik, is Professor of the Economics of Organization, Department of Administrative Sciences, Yale University. He is author of four books; the most recent is *Game Theory and Related Approaches to Social Behavior*. He edited the recent *Essays in Mathematical Economics in Honor of Oskar Morgenstern*.

THIS mammoth compendium is split into five parts with an introduction and concluding section to boot. The section titles, "Organization and Control," "Social Effects of Policies and their Measurement," "Conflict Resolution and Control," "The Systems Concept as a Common Frame of Reference," and "Models, Decisions, and Operational Research," give a fair indication of the contents of the book. An excellent synopsis of the book is also provided.

Any editor who tries to bring order out of the chaos of over forty papers from a conference together with a couple of talks has selected a Herculean task. Even a partial success may be regarded as a vindication of his abilities. The book is successful in the sense that it belongs in many a library where people will use it to read two or three of its articles. It is hard to believe that anyone other than a reviewer will wish to read the whole book, but many will read some of the first-rate material it contains.

We live in the age of the conference book and we suffer from it. This book shows an enormous amount of work by the editor: synopses, connective passages, bibliographies, and commentaries. It may well be the best of its kind but three or four shorter, cheaper books would have been far more useful and would have required not very much more work.

Part II (which has 276 pages) would have made a good book by itself. Several of the articles are of considerable value to the operations researcher of the more quantitative variety who wishes to find out what his behavioristic brethren are talking about. The Bennis article on "Theory and Method in applying Behavioural Science to Planned Organizational Change" is well worth reading by all. Burns's paper, "On the Plurality of Social Systems," comes out with many fighting words concerning his belief in the uselessness of current organization theories. The attack was fun to read but a viable alternative is not made clear (maybe Zen?). Arthur Brown's "Artifacts, Automation, and Human Abilities" gives a stimulating discussion of the automation possibilities and man as an information processor. The summary and commentary presents a reasoned case for the need for more joint work between the behavioral scientist and operations researcher. The difficulties in doing so are reviewed.

PART III is relatively brief (with only six chapters) and can be summed up as the "Welfare Economists' Corner." Cost benefit analysis and the Pigovian welfare function are discussed. This booklet is not really directed at psychologists or social psychologists but is home territory for those in organization research or economics.

Part IV, with 133 pages, is another book—this one on "Conflict Resolution and Control." Here the intermix of disciplines is once more clearly to the fore. All parties are represented and many views of the same landscape are presented. This comes through to such an extent that in the discussion and commentary an eloquent plea for multidisciplinary work is made.

This part is somewhat unsatisfactory

inasmuch as an extra one or two hundred pages could have made it into a useful book, or a seventy or eighty page survey and philosophical article might have served better than the eight very diverse chapters.

Part V is in some sense like the major battle scene at the end of an enormously long Russian novel. The reader who has survived 499 + xxxiv pages is now confronted by three articles aimed towards a general systems theory. Rapoport concentrates on the role of the mathematical model with not too much explicit concern for his social psychologist and other behavioral brethren, while Welford takes a "new look at social psychology."

A catchall section and the concluding remarks occupy the remaining 86 pages. Several of the papers are fascinating, such as that of Farquharson on committee procedure, but they are editorial orphans in the Part VI orphanage entitled "Models, Decisions, and Operational Research." A good combined bibliography is provided and at page 669 the book ends.

As a reviewer interested in just about every aspect of the work presented in the book, it appears to me to be a great shame that so much first-rate effort should have been misdirected. A series of related paperbacks aimed at giving the overview of operational research and the social sciences would be of great value and would reach a large market. Twenty-one dollars and seven hundred pages is not the way to do it. There is little reason for an individual wanting to add this to his library, yet there is a great need for several related books to do the job that this worthy collection tried to do, but failed.



... the sense of identity requires the existence of another by whom one is known, and a conjunction of this other person's recognition of one's self with self-recognition.

—R. D. LAING



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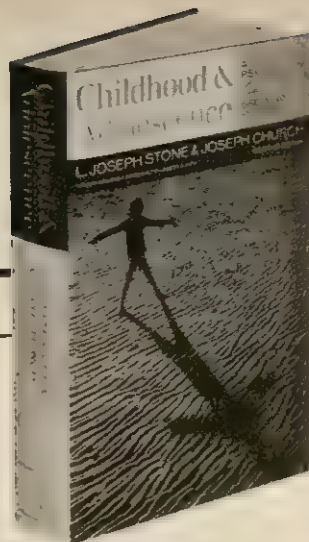
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by JOHN C. LOEHLIN, *University of Texas*

Random House, May 1968; PP-36; 192 pages; \$2.45 paperbound

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THE DYNAMICS OF BEHAVIOR DEVELOPMENT

An Epigenetic View

by ZING-YANG KUO

Random House, 1967; PP-34; 256 pages; \$2.50 paperbound

EXPERIMENTAL STUDIES OF DREAMING

Edited by HERMAN A. WITKIN, *Downstate Medical Center, State University of New York* and HELEN B. LEWIS, *Clark University* with contributions by FREDERICK SNYDER, CHARLES FISHER, and DONALD GOODENOUGH

Random House, 1967; PP-35; 224 pages; \$2.95 paperbound



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When We Don't Speak Good

Randolph Quirk and Jan Svartvik

Investigating Linguistic Acceptability. The Hague: Mouton, 1966.
Pp. 117. Dutch Guilders 14.—

Reviewed by WALTER S. STOLZ

The first author, Randolph Quirk, is Professor of English Language and Director of the Survey of English Usage at University College, London. He has published four books previously on various aspects of old and modern English including *The Use of English* (1962). Jan Svartvik is lecturer in English at the University of Gothenberg, Sweden, since 1965. From 1962 through 1965, he was Assistant Director of the Survey of English Usage at University College. He is the author of *On Voice in the English Verb* (1966).

The reviewer, Walter S. Stolz, received his education at the University of Wisconsin, receiving the PhD in 1964. He then spent a post-doctoral year at the Center for Cognitive Studies at Harvard and is now in the Department of Psychology at the University of Texas at Austin. His primary interest is in psycholinguistics.

THIS MONOGRAPH is a report of several experiments which were performed to study the notion "acceptability of a sentence" and relate this to how people perform various operations on strange or semi-grammatical sentences. Linguists sharpened their interest in all sorts of borderline English sentences about ten years ago when the linguist Chomsky proclaimed the basic objective of a grammar to be a description of "all and only the grammatical sentences in a language." And who is to say what is grammatical and what is not? Native speakers, of course. So several linguists and psycholinguists tried to find out exactly which utterances an English grammar should account for. Unfortunately, they found that the average native English speaker does not do anything very meaningful

when confronted with the instruction "rate the following sentence with respect to how grammatical it is." In addition, sentences were brought forth which were fully grammatical, but very difficult to understand (e.g. *The vase that the maid that the agency hired dropped broke on the floor.*) These typically receive low ratings apparently because of their cognitive intractability. In recent years, attempts to elicit direct grammaticality judgments from naive speakers have been abandoned because of the general recognition that such judgments are seriously influenced by cognitive processing factors which have no direct theoretical bearing on grammaticality. "Sentence acceptability" is the current term for what a speaker is doing when he rates how queer or normal a sentence is, and this admittedly is a function of both the rules of the language and many factors of cognitive processing. This new construct of acceptability is clearly a psycholinguistic one, and so psychologists of language are currently looking at semi-acceptable sentences for psychological reasons. The basic hope is, of course, that a study of how people handle sentences with various sorts of aberrant structures will give clues to the strategies used in perceiving and uttering normal ones.

QUIRK and Svartvik's subjects rated the acceptability of a sentence on a three-point scale labeled "wholly natural and normal," "marginal or dubious," and "wholly natural and abnormal." In the "operations test," the same sentences were presented aurally, each with one of eight instructions regarding the form in which the subject was to write it down. Examples of the instructions are "turn the verb of the sentence into the present tense," "replace a given singular subject pronoun by a given plural subject pronoun," and "turn the sentence into a question beginning with a given form of the verb *to be*." Two groups of British university students, 28 and 48 in number, were the subjects, with the smaller group composed exclusively of recipients of "English honors."

The authors found that the acceptability of a sentence was correlated

with success in performing operations on it; the less acceptable the sentence, the smaller was the number of subjects who would write out a properly transformed version of it in the twenty-second time interval.

The most detailed analysis of the experimental data sought to relate the type of error made on the operations test to the type of flaw (linguistically defined) in the sentence. Again, the general result was fairly obvious. Most of the mistakes were made in the part of the sentence that was unacceptable and most of these were of the sort that made the sentence more acceptable. For example, the most frequent mistake in the pluralization of *I regard him foolish* was the insertion of *as* to produce *We regard him as foolish*.

The most serious criticism of the book that this reviewer has is that there is not enough rationale presented to justify the choice of specific materials and procedures. Some 50 sentences were used, but the reasons for their selection are quite obscure. At best, the authors appeared to regard them as "interesting." The methods used also seem to lack a clear rational justification. For example, the authors deplore the previous uses of dichotomous scales because they are too crude and five- and seven-point scales for being too fine; they settle rather mystically on a three-point version. More seriously, the reasons for choosing the eight sentence manipulation instructions are not explicated. The main criterion seemed to be one "of each sentence having precisely the same degree of deviance after the operation has been performed as it had before." How this measurement of deviance was made *a priori* for each sentence-operation pair is left completely unexplained.

In spite of these shortcomings, the authors should be commended for their original approach to a domain that is both theoretically important and essentially untouched. An understanding of how people interpret utterances that do not conform to the rules of their language is important to both linguists and psycholinguists.

An Innovation for Innovators

George W. Fairweather

Methods for Experimental Social Innovation. New York: Wiley, 1967.

Pp. x + 250.

Reviewed by HARVEY A. HORNSTEIN

The author, George Fairweather, is Chief of the Social-Clinical Psychology Research Service Unit at the VA Hospital, Palo Alto, California. He holds a PhD in psychology and sociology from the University of Illinois. He has been at VA hospitals in Houston and Perry Point, Maryland, and has edited *Social Psychology in Treating Mental Illness: An Experimental Approach* and has in preparation with other authors, *Treating Mental Illness in the Community: An Experimental Social Innovation*.

The reviewer, Harvey A. Hornstein, is Assistant Professor of Psychology in the Doctoral Program in Social Psychology, Teachers College, Columbia. He received his PhD in social psychology under Morton Deutsch from Teachers College in 1964 and since then has conducted laboratory research on interpersonal and intergroup cooperation, and on positive social behavior and social responsibility. He has also been interested in the problems and processes of organizational and social change.

OVER two decades have passed since Lewin reportedly said, "No action without research; no research without action." Even today, most social scientists would vigorously approve the validity of this statement. Nevertheless, there is an increasingly vocal group of critics pointing to the separation of research and social action. Although many voice this criticism, few offer any concrete alternatives. In contrast, George W. Fairweather's book, *Methods for Experimental Social Innovation*, presents an intelligent and well-formu-

lated attempt to bridge that separation. The book disapproves of the social scientist's lack of participation in social action programs as well as of the methods by which society formulates its solutions to social problems.

IN EFFECT, this book is a detailed, but readable, account of the author's experimental approach to social innovation. The approach consists of three phases: a planning phase (which is further subdivided); an action and evaluation phase; and a dissemination phase. In discussing these three phases over the course of eleven of the chapters, the author covers issues basic to experimental social innovation as well as to most forms of experimental and field research. For example, he discusses such topics as defining the research question, obtaining administrative commitments, forming the research team, and developing an experimental design. He also deals with problems of sampling, data analysis, and eventual publication of the results.

By definition, social innovation implies an attempt to solve social problems. Experimental social innovation, in contrast to non-experimental social innovation, implies the systematic control of conditions in order to evaluate the efficacy of alternative solutions to social problems. It differs from other laboratory and field experiments inasmuch as its primary goal is to solve a defined social problem by introducing alternative social action programs within their natural settings. Intrinsic to this approach is the necessity for the researcher

to assume the responsibility for the participants' welfare. Indeed, as Fairweather emphasizes, the objective of experimental social innovation is the improvement of social welfare.

An experimental enterprise of this nature will inevitably involve many administrative problems. Here the book is at its best. The author draws upon his thirteen years' experience with this research approach and calls the reader's attention to those administrative aspects of conducting research that often go unnoticed until they become problems. For example, he discusses conditions that generally foster intra-staff conflicts or researcher-administration conflicts. Following this, he presents a series of questions that the researcher might ask himself and others in order to clarify working relationships and avoid conflicts. He also discusses the less interpersonal, more technical problems of preparation of instructions for respondents, the need for storage space, and the preparation of data for the computer. This unusually thorough review of administrative problems should be useful to both the novice and the experienced researcher.

In contrast, those sections dealing with experimental design, measurement, and statistics are somewhat superficial. They lack sufficient depth to be informative to novices or to serve as reviews for experienced researchers. This material is presented more adequately in a number of other sources, not all of which are referred to in these chapters. For example, there are no references to Campbell's and Stanley's classic, "Experimental and quasi-experimental designs for research," nor are there any references to Coleman's work with cross-lag panel analysis, a most useful tool for this brand of research. Nevertheless, the book does contain a number of other references to work in experimental design, measurement, and statistics which its readers might pursue.

REGRETTABLY, there is no explicit discussion of the methodological assumptions underlying this experimental approach. It is regretful because these assumptions stand in sharp contrast to the traditional ones held by laboratory

researchers, and the contrast should spark a fiery debate. Fairweather's approach to experimental social innovation assumes a strictly pragmatic stance. The solutions to the social problems, i.e., the independent variables, are a product of the experimenter's intuition, which is nourished by his first-hand experience and his knowledge of past research. In conducting the experiment his primary objective is to determine which of several possible solutions is most productive. Subsequent experiments represent attempts to produce more efficient solutions for social problems by intensifying the interplay of critical variables. The solutions, once obtained, are generalized to other social systems on the basis of representativeness. That is, the applicability of the solution to some other social system depends on the similarity of that social system to the one in which the solution proved efficacious.

A more traditional view is that the purpose of the experiment is not only to investigate methods for improving social welfare but also to test the validity of certain theoretical principles. The solutions, or independent variables, are important primarily because they represent essential theoretical concepts. In this case the researcher is not so much concerned with *what* works best, as he is with *why* it works as it does. He generalizes to other situations through the application of a systematic set of theoretical principles, not through the actual similarity between two social systems.

Given the present level of theoretical development in the social sciences, the more traditional approach hardly seems tenable. But in the long run, social change planning will benefit most from a systematic set of theoretical principles which it could use to guide decision making.

Perhaps the debate between the proponents of these two approaches can be held in one of the 'Centers for Experimental Social Innovation,' which Fairweather proposes. This exciting and novel proposal is developed in the book's final chapter. These centers are multi-disciplinary institutes whose primary purpose is to seek solutions to social problems through controlled research. These centers would have a

full-time professional staff engaged in research and the training of new staff. In effect, the proposal is to create a new role group within the social sciences whose commitment would be to both research and action.

In making this proposal, the book, *Methods for Experimental Social Innovation*, completes its stated purpose, to bridge the gap between action and research. For this reason, it has implications for the role of the social sciences in contemporary society and will be of interest to all social scientists.

Hands Across the Psycho-Physiological Divide

I. P. Howard and W. B. Templeton

Human Spatial Orientation. New York: Wiley, 1966. Pp. 533.

Reviewed by OTTO E. LOWENSTEIN

The first author, I. P. Howard, is now Professor in the Department of Psychology, York University, Toronto, and the second, W. B. Templeton, is Lecturer in the Department of Psychology, University of Durham. They worked together on figural after-effects, adaptation in relative depth perception, eye torsion and prism aftereffects. Howard has published the design for a mechanical rat and worked on reversible figures.

The reviewer, O. E. Lowenstein, is Mason Professor of Zoology and Comparative Physiology, University of Birmingham. He has worked generally on the electro-physiology and ultrastructure of the vertebrate ear, as well as on stretch receptors in invertebrates. He says that he feels more competent to judge the physiological than the psychological aspects of this book.

Spatial Orientation in the widest sense of the term involves visual, mechano-receptor, and auditory mechanisms both on the physiological and on the psychological level. Orientation to gravity dependent on a variety of mechano-receptors is generally closely interwoven with the processing of visual clues, and the disentanglement of these two components is a fascinating but methodologically difficult task calling for a unified psycho-physiological approach in experimentation.

Egocentric experience and appreciation of shape are important components in spatial orientation. Finally, man's venture into space calls for a renewed and deepening interest in the basic physiological and psychological features of orientation.

The aim behind this book is a comprehensive summary of all aspects of orientation ranging from the morphology and basic physiology of some relevant sense organs to aspects of appreciation of experiences, the exploration of which rests almost entirely on the use of the methods of experimental psychology. Thus, the authors faced the difficult task of collecting data based on methods of widely different rigor.

The authors appear to have found it difficult always to make a critical selection from among contradictory findings in so wide and inhomogeneous a field. Indeed, they have chosen in many cases to present contradictory findings side-by-side without much helpful comment. Thus, the expository character of the book becomes only too frequently diluted by long stretches of 'review-type catalogs of relevant publications' not even exclusively of the most recent vintage.

THE chief question in assessing the merits of the book is how far it succeeds in integrating physiological and psychological findings into a system which is of heuristic value to workers in both disciplines. Cybernetic aspects of the utilization and processing of sensory information by the central nervous system could reach out helping hands across the psycho-physiological divide and serve as an integrating bond. Although this possibility may have been

fully recognized by the authors, the establishment of the bond appears to have been somewhat impeded by the difficulties inherent in joint or divided authorship, as the case may be. Both authors are experimental psychologists. Nevertheless the physiological treatment of the role of the various receptor systems in orientation is remarkably adequate and up-to-date. It may in fact be asking too much to expect a complete integration of such data with the observations and analyses of human subjective experience as recorded in the psychological laboratory.

It is a hard fact of methodology that analyses on both levels as described in the book are derived from experiments in which either the physiological or the psychological substrate was by necessity excluded from consideration.

The book is full of valuable information useful to all concerned with the subject of spatial orientation in man and its physiological and behavioral animal background. However, the very abundance of matter presented and the astonishingly complete coverage of the literature makes this a difficult book to read, despite some good and appropriately chosen illustrations. The up-to-dateness of the account is born out by the inclusion of a last chapter dealing with orientation in the weightless state which draws attention to some of the psycho-physiological problems connected with space travel.

Eighty pages of references and a subject index round off a book which ought to be available, as a guide to the literature, wherever relevant research is carried out.



The language of cause and effect (of which 'force' is a particular case) is thus merely a convenient shorthand for certain purposes; it does not represent anything that is genuinely to be found in the physical world.

—BERTRAND RUSSELL



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A Cluttered Approach to Speech Pathology

Deso A. Weiss

Cluttering. Prentice-Hall Foundations of Speech Pathology Series, Englewood Cliffs, N. J., 1964. Pp. xii + 138.

Nancy E. Wood

Delayed Speech and Language Development. Prentice-Hall Foundations of Speech Pathology Series, Englewood Cliffs, N. J., 1964. Pp. xv + 142.

Frederick L. Darley

Diagnosis and Appraisal of Communication Disorders. Prentice-Hall Foundations of Speech Pathology Series, Englewood Cliffs, N. J., 1964. Pp. viii + 152.

Eugene T. McDonald and Burton Chance, Jr.

Cerebral Palsy. Prentice-Hall Foundations of Speech Pathology Series, Englewood Cliffs, N. J., 1964. Pp. xi + 146.

Reviewed by GERTRUD L. WYATT

Dr. D. Weiss, the author of the first book, is a physician specializing in psychiatry and speech pathology. Having been associated for many years with Prof. Dr. E. Froeschels at the renowned Voice and Speech Clinic of the University of Vienna, Austria, he practices now in New York City. Dr. Wood, who at the time her book was published held the position of research director at the John Tracy Clinic at Los Angeles, at present is Professor of Language Pathology at the University of Southern California. Dr. Darley is consultant in speech pathology at the Mayo Clinic and associate professor at the Mayo Foundation. Dr. McDonald, one of the co-authors of the last book, is research professor of speech pathology at The Pennsylvania State University, while Dr. Chance, Jr. is an associate surgeon at the Orthopedic Department of the Philadelphia Children's Hospital and medical director of two schools for cerebral palsied children.

The reviewer, Gertrud L. Wyatt, continues to be director of psychological and speech therapy services at the Public Schools of Wellesley, Massachusetts, lecturer at Tufts University, Medford, and at Lesley College, Cambridge, and supervisor of graduate students at Boston University. Since 1965, when she last contributed to *Contemporary Psychology*, she has been the recipient of a Guggenheim Fellowship Award and has completed a book on Language Learning and Communication Disorders in Children, which will be published by The Free Press.

THE four books to be discussed here form part of a series edited by Dr. Charles Van Riper. The purpose of the series, as stated by the editor, is "to serve as the nucleus of a professional library, both for students of speech pathology and audiology and for the practicing clinician." Such an ambitious plan can not always be realized within

the constraints of the 130 to 160 pages allotted for each volume. The obligation to present within such limits a comprehensive text fitting for apprentices as well as experts interfered in some instances with the writers' style and, at least in one volume, led to an inappropriate organization of the material.

A particular oddity of these small books is a feature to which the editor points with particular pride, namely, the insertion of so-called "search items," which are expected to induce the reader "to explore, to search, and to discover." Rather than providing at the end of each chapter the customary "suggestions for further reading" the designers of these volumes have adopted the device of inserting in small print paragraphs of various length, containing references, suggestions, and assignments. As a result of this design the printed page is cluttered with inserts, varying in length from three lines to twenty-one, sometimes splitting the text apart right in the middle of a sentence. The resulting visual and cognitive confusion is enhanced by the fact that the authors use footnotes in addition to "search items," and that a piece of information mentioned in a later item may contain a reference to an earlier one. The total layout causes a certain dizziness in the reader who tries to shuttle back and forth between sections of the text and sections of the "search items." Our present familiarity with the plight of "perceptually handicapped" children trying to read the crowded pages of many ordinary school books, should have warned the editors against creating unnecessary "reading difficulties" for the professional using the books in this series. However, clinical and school psychologists as well as speech and educational therapists who can cope with these difficulties or work their way around them—as this reviewer did—will find much new and valuable material in the books.

In his treatise on *Cluttering*, Deso Weiss actually succeeded in providing both students and clinicians with basically new and systematic information concerning an often overlooked neurogenic speech disorder. "Cluttering," often confused with "stuttering"—a

speech disorder which is psychogenic in origin—until recently has found little attention in American professional literature. Weiss's own research and publications concerning this multisymptomatic disorder go back more than thirty years. In the present volume he presents skillfully his own findings together with those of other, mostly European, investigators, thus making an important contribution to American speech pathology. Chapters on symptomatology and diagnosis are followed by a realistic discussion of therapy, which should be most helpful to practitioners. Readers who are familiar with the growing and often controversial literature on perceptual-motor disorders in children will be interested in the author's theoretical position. Focusing at first upon the varied difficulties the clutterer experiences in overt speech, Weiss gradually extends his observations to include the motor restlessness, the short attention span, and the difficulties in grammar, reading, and writing which may accompany the speech disorder. Eventually, the author develops his concept of "general language imbalance," to account for the multiple symptoms observed. Clinical and school psychologists involved in the diagnosis and education of children with multiple language and learning disabilities will gain much from the clinical insights and the recommendations for the management of cluttering children, contained in this volume.

NANCY E. WOOD's book on children with delayed speech and language development is remarkable, not so much for its content as for its point of view. Under the headings of causality, diagnosis, and therapy, the author briefly but systematically discusses the contributions of such well known specialists as Bayley, Carhart, Cruickshank, Ewing, Froeschels, Frostig, de Hirsch, Kephart, Knobloch and Passamanik, Luria, Myklebust, Spitz, Stevens, Strauss, Templin, D. Weiss, West, Westlake, and others, together with her own research in language disorders. Her interest in the clinical training of graduate students in speech pathology is evident in these pages. It is surprising how much

sound clinical advice on history taking, observational techniques, diagnostic and therapeutic procedures, recording, or parent counseling the author was able to combine with a discussion of the pertinent literature. Readers will regret the limitations of space which interfered with the full realization of her intentions. These constraints are noticeable particularly in Chapter I, dealing with the development of speech and language in childhood. Dr. Wood rightly felt that a description of normal language development should precede the discussion of the clinical manifestations of delayed development. Unfortunately, this chapter of 18 pages can provide only insufficient information for the beginning student and is unnecessary for the professional reader. The remaining 108 pages of the book are permeated by a clinical point of view, representing a sophisticated and much needed integration of psychology, medical science, and speech pathology. At a time when legislatures in many states are sanctioning innovative programs for the therapeutic education of children with varying types of difficulties, psychologists will want to know more about the technical knowledge and skills of educators, speech therapists, and reading tutors, while these specialists will have to transcend the often narrow and compartmentalized practices derived from their schooling. In her book Dr. Wood aims at an inter-disciplinary approach; one can only wish that in the future she will present her ideas in a more extensive format. In the meantime, this small volume is recommended as supplementary reading for courses in speech pathology, child development, and early childhood education.

F. L. DARLEY's *Diagnosis and Appraisal of Communication Disorders*, more than the other two books, suffers from the spatial limitations inherent in this series. The author ambitiously attempts to provide a compendium of diagnostic and testing procedures applicable to a large variety of voice, speech, language, and hearing disorders. In 127 pages he not only describes more than 50 tests, but also discusses the nature of the diagnostic appraisal, and

the relationship between differential diagnosis, the formulation of a diagnostic hypothesis, followed by a tentative approach to therapy and by reappraisal of the condition treated—a section which to the reviewer appeared to be the most stimulating and valuable contribution made in this volume. The tests described range from those most familiar to psychologists, such as the Binet, the WISC and the WAIS, the Rorschach, TAT, C.A.T., MMPI, and a number of reading tests, to such specialized instruments as the Michigan Picture Language Inventory, The Illinois Test of Psycho-linguistic Abilities (ITPA), picture vocabulary tests, articulation tests, Wepman's Test of Auditory Discrimination, the Oseretsky Tests of Motor Proficiency, the Minnesota Test for Differential Diagnosis of Aphasia, and many others. Clinical psychologists working as members of diagnostic teams might find it helpful to have access to these brief summaries of varied tests; students, however, may feel confused by the number of procedures mentioned and the brevity of their presentation. For instance, the complexities of the ITPA, together with Osgood's theoretical model underlying it, are covered in 55 lines of text. The author states that "the list of possible tests is infinite"; in spite of this infinity his reasons for choosing a particular instrument to be used for a particular condition are not always made sufficiently clear. Rather than relating diagnostic procedures to clinical entities, Darley chose to organize his material around such part-aspects of communication as symbolization, respiration, phonation, articulation-resonance, prosody, sensory-perceptual functions, the oral speech-output apparatus, associated behavior, and environmental influence. In this manner the integrated processes of communication become fragmented. For example, the clinical worker interested in a stuttering child will find tests to examine the stutterer's respiration, voice pitch, articulation-resonance, or his speech-output apparatus; the reviewer, who holds a developmental and dynamic point of view concerning the inter-personal processes of communication as well as of stuttering, would rely for a diagnostic formu-

lation primarily on an extensive case history and would consider tests of part-aspects of verbal performance meaningless and counter-indicated for this particular condition. In summary, one might say that Darley's book contains a great deal of information which, differently organized and presented in greater detail, should prove of great value to speech pathologists as well as psychologists.

to the books by Wood and by Darley, which were somewhat distorted by limitations of space, the authors of this volume succeeded well in selecting their material in accordance with the space available. Living up to the claims of the editor, their book should make excellent reading for courses in speech pathology, social work, and occupational therapy; it should also find its place in the basic library of clinical child psychologists.

INNUMERABLE PSYCHOLOGISTS, including some clinicians, express dismay at the fact that Rorschach's test continues to be taken seriously by many of their colleagues. If these critics were to read Schachtel's scholarly book, their expectations of the test's imminent death would in all likelihood be sharply revised.

Schachtel, a training analyst with a European background and a deep understanding of the humanities, became known to many American psychologists through four articles on Rorschach's test which were published in *Psychiatry* between 1941 and 1950. These articles (on form, color, movement, and the test situation) are included in the present book—although some have been revised considerably—along with previously unpublished material. The new and the old have been interwoven skillfully so as to create within the reader the sense of a coherent whole.

Like the analyst who begins many of his discussions by referring to Freud's writings, Schachtel develops many of his points by first citing Rorschach's original work. (In so doing, he sometimes finds it necessary to make a fresh translation of a passage which, in the standard English edition, has not, in his judgment, captured the essence of Rorschach's thought.) Through these references his respect for Rorschach's creativeness becomes quite evident. This does not mean, however, that Schachtel is unwilling to modify Rorschach's position if he reads the evidence as requiring it. And there is ample indication that Schachtel has a broad familiarity with the evidence, both European and American. It is equally clear that he has not been deeply influenced by some of the more prominent American teachers of the Rorschach technique such as Klopfer, Beck, and Hertz (the latter is mentioned only once, in one of a copious supply of footnotes).

WHAT is the primary aim of this book? Put succinctly, it is "to add to the theoretical understanding of the test (p. v.)." Since theory and practice have a close relationship, however, there is throughout the book frequent refer-

Experience Through Inkblots

Ernest G. Schachtel

Experiential Foundations of Rorschach's Test. New York: Basic Books, 1966. Pp. 342. \$7.95.

Reviewed by E. EARL BAUGHMAN

The author, Ernest G. Schachtel, is in the private practice of psychoanalysis and diagnostic testing in New York City, Training and Supervisory Analyst, William Alanson White Institute, and Adjunct Professor of Psychology, Post-Doctoral Training Program, New York University. He is the author of Metamorphosis (CP, Jan. 1961, 6, 1).

The reviewer, E. Earl Baughman, received a University of Chicago PhD and has taught at the University of Wisconsin and the University of North Carolina where he is now Professor of Psychology. He is co-author with Welsh of Personality: A Behavioral Science and co-author with Dalhstrom of a forthcoming book, Negro and White Children, reporting an empirical study of Southern rural children. He is also author of several experimental studies of Rorschach's test, focusing primarily upon the stimulus properties of the inkblots.

MCDONALD'S AND CHANCE'S book on *Cerebral Palsy* is the last to be discussed here. Not being overly familiar with recent developments in this field, the reviewer approached the book more in the spirit of a student than that of an expert and found it well worth reading. The cooperation between a physician and a speech pathologist has led to a succinct delineation of the medical as well as the development problems of children handicapped by cerebral palsy. The medical chapters, I to III, are written in readable popular style, accompanied by a few well chosen illustrations. The neurophysiology and etiology of the disorder are explained and the need for multi-disciplinary and comprehensive training programs is well stated. Psychological readers may be particularly interested in the unbiased discussion of various approaches to therapy used at present in this country; systems of therapy developed by Phelps, Rood, the Bobarths, Kabat and Knott, and by Temple Fay ("patterning"), are described briefly and clearly. Readers of varied professional backgrounds working in rehabilitation programs will benefit from the authors' insightful analyses of professional roles and of the problems of cooperation and communication within therapeutic teams. The section on speech and language therapy is introduced by a brief exposition of the neurophysiological foundations of language development. The techniques described are derived mostly from the well known work done by Cass, Cruickshank, Darley, Denhoff and Robinault, Kastein, Palmer, Strauss and Kephart, R. E. West, and Westlake. Discussions of methodology and of technical procedures are enlivened by references to actual cases. In contrast

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From the "Journal of Individual Psychology"—1965—Volume 2, page 102:

This is the much to-be-welcomed first volume of a new series that will collate and interpret research in child development. All twelve contributions are specially prepared original works that have been put through the critical mill of two series of readers. The result is a first-rate survey of contemporary research in child development which is to be highly recommended.

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ence to the interpretive significance that certain observations made during a Rorschach examination may have. In this regard, the emphasis among the test scores is clearly upon the determinants; although other scores such as location and content are not neglected completely, Schachtel leaves no doubt that he considers the determinants to be "the most important test scores (p. v.)." He also shows that there is much more to be considered about a Rorschach examination than just the test responses.

Schachtel's formulations, as he points out, have been influenced most heavily by the psychoanalytic and phenomenological modes of thought. His major concern is with what observations may suggest about the internal experiences of the testee, how the latter structures his world, feels in relationship to it, and so on. The focus is not upon the prediction of external observables—suicide, a psychotic episode, likely response to psychotherapy, or what have you—but rather upon the inner personal world of the subject who has been asked to give responses to inkblots. In Schachtel's own words, "I call the main approach I use for the understanding of these problems 'experiential' because it consists mostly in the attempt to reconstruct, to understand, and to make more explicit the experiences that the testee underwent in taking the test and his reaction to these experiences. . . . By 'experience' I mean conscious as well as unconscious and only vaguely or peripherally conscious experiences (p. 4)." A major problem in such constructions, of course, revolves around the question of how one arrives at a determination of the validity of the inner-psychic map that is drawn, and in this regard it must be acknowledged that the author does not advance our thinking appreciably.

Schachtel addresses himself ". . . primarily to those already acquainted with Rorschach's test, to advanced students of the test, and to clinicians using the test or interested in it for other reasons (p. v)." Without question, this audience will find his work of considerable value. In this reviewer's opinion, however, beginning students of personality assessment also would be well advised to read Schachtel with care even though

they may find parts of the manuscript obscure. This is the work of a perceptive, experienced, and wise clinician who is much more than a mechanical technician; there is much to be learned by sitting at his feet. Indeed, anyone who sees value in the phenomenological and psychoanalytic viewpoints may find this book of interest, even if he never plans to encounter an inkblot professionally. Schachtel may very well have written for a wider audience than he envisaged.

How to . . . Rorschach

Robert M. Allen

Student's Rorschach Manual: An Introduction to Administering, Scoring and Interpreting Rorschach's Psychodiagnostic Inkblot Test. New York: International Universities Press, 1966. Pp. xvii + 280. \$7.00.

Reviewed by IVAN N. MENSCH

The author, Robert M. Allen, received his PhD from New York University in 1938, has been chief clinical psychologist at VA hospitals, on the clinical faculties of Rutgers and NYU, and is at present Professor of Psychology at the University of Miami. He is the author of nine texts on assessment procedures, test construction, and mental retardation, and author of a number of journal articles and a monograph on the Rorschach Test.

The reviewer, Ivan N. Mensch, with a PhD from Northwestern, is Professor and Head, Division of Medical Psychology at UCLA School of Medicine. He has conducted a number of studies of the Rorschach Test in assessment procedures and taught projective techniques after training by S. J. Beck. As

with many "Rorschachers," he has struggled with the dilemma of art versus science in the utilization of the Rorschach.

THE RORSCHACH inkblot series I have been titled "test," "method," "technique," "investigation," and just plain "Rorschach." It has been attacked and defended vigorously, with a prodigious literature resulting, within and without the official journal of the Society of Projective Techniques. Once the basis for several semesters of study at basic and advanced levels by graduate students of clinical psychology, courses in the Rorschach method in most departments now have been whittled down to the point where all of the projective methods are taught within a single quarter or semester. Yet, there still appear dissertations on the Rorschach, and clinical psychodiagnosticians appear loath to forsake this part of their art, no matter the weight of "reliability" and "validity" studies nor the verbal skills of Meehl, Zubin, and other investigators.

Allen has accumulated nearly three decades of diagnostic experience with the Rorschach test. In 1953 he published his first *Manual* on the technique, summarizing more than a dozen prior years of experience and his learning "from the experts . . . Bruno Klopfer . . . Florence Halpern . . . Sigmund A. Piotrowski. . . ." At that time he prefaced his text with "Now it is the author's turn to teach," and acknowledged the contributions of Samuel J. Beck. A second volume followed in 1954 and a dozen years later, in 1966, the present publication was designed for the current scene as a "how to" book for first and second year graduate students. Some readers may wonder why there is no mention of such scoring systems as those of Holt or Mayman, or of other inkblot tests, but Allen holds to his methods of teaching the Rorschach and devotes his instructions to the three areas of test administration, scoring, and interpretation. As a clinician, he argues that "an advanced level of interpretation and integration of the Rorschach Test cannot be taught from a book. The insights that emerge from experience with this and other tests, from

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Edited by A. I. Rabin, Ph.D., *Professor of Psychology, Michigan State University*

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clinical interviews, and from the suitable use of case history data, are a function of time, supervision, and the tester's astuteness as an observer of the human scene." No cook-book recipe for Dr. Allen!

After a brief review, in his Foreword, of "the important attributes of validity and reliability . . . (which are) not discussed in the body of the test," Allen concludes that "A comparison of the earlier and current practices and thinking with the Rorschach Test confirms the adage: *Plus ça change, plus c'est la même chose*." These issues again are raised, however, in his critique of the chapter on "The Interpretation of Content."

The extensive clinical experience of the author makes it difficult for him to write solely of administration or scoring, and interpretation of both test-taking behaviors and test content creeps in inevitably as the "how to" instructions are described. Thus, when he writes of "the method . . . not interpretations . . .," there quickly enters the "meaning" of the test situation, the subject's reactions, and the content of responses. Also, Allen instructs his students to ask the subject directly, "rather than relying on unproved generalizations," when the examiner tests the validity and reliability of his evaluation by means of "the clinical acumen of the experienced observer." Since the usual graduate student hardly is an "experienced observer" in his first and second years, the major task of clinical instruction is to mobilize in easy visibility to the student the many cues which are utilized by the experienced clinician in his personal, complex, built-in computer.

Allen's *Manual* for the student frequently touches on the phenomena of instruction and clinical experience. Once the student has mastered the mechanics of administering and of scoring the Rorschach test responses of the subject, he then must gather this clinical experience. Opponents of projective techniques as diagnostic methods, especially the Rorschach, do not, however, accept these elements as satisfying rigorous criteria of test construction and development. So, again "*Plus ça change, plus c'est la même chose*."

History of Psychology: Variations on a Theme

Henry Misiak and Virginia Staudt Sexton

History of Psychology: An Overview. New York and London: Grune & Stratton, 1966. Pp. x + 499. \$12.50.

Alf Nyman. (Tr. from Swedish by EWALD BOHM)

Die Schulen der neueren Psychologie. Bern and Stuttgart: Hans Huber, 1966. Pp. 258.

Ludwig J. Pongratz

Problemgeschichte der Psychologie. Bern and Munich, 1967. Pp. 572. DM 39.00.

Maurice Reuchlin

Histoire de la Psychologie. Fifth Rev. Ed. Paris: Presses Universitaires de France, 1966. Pp. 127.

Kurt v. Sury and co-workers

Wörterbuch der Psychologie und ihrer Grenzgebiete. 3rd Rev. Ed. Basel and Stuttgart: Schwabe & Co., 1967. Pp. 324. Sw. Fr. 28.50.

John B. Watson

Behavior: An Introduction to Comparative Psychology. Intro. by R. J. Herrnstein. New York: Holt, Rinehart & Winston, 1967. Pp. xxxvi + 439. \$7.95.

Reviewed by JOSEF BROŽEK

H. Misiak and Virginia Staudt Sexton, the authors of the *History of Psychology*, are associated with Fordham University and the Hunter College of the City University of New York, respectively. Father Misiak is an experimental psychologist with historical interests. He is the author of *The Philosophical Roots of Scientific Psychology* (Fordham U., 1961) and co-author, with Virginia M. Stoudt (Sexton), of *Catholics in Psychology: A Historical Sur-*

vey (New York: McGraw-Hill, 1954). Alf Nyman's *Schools* appeared first under the title *Nya vägar inom psykologien* which could be identified, even by non-linguists (with luck), as being in the Swedish language. The author carried out studies in "experimental logic" (1928) and wrote on the unconscious (1929, in German; 1933, in Swedish). Author of the next book, L. J. Pongratz, born in 1915, was initiated into the academic community at the

University of Heidelberg. At present he is associated with the School of Education (Pädagogische Hochschule) at Würzburg. In addition to the history of psychology, his interests encompass social psychology of learning and psychotherapy. The next author, Maurice Reuchlin, associated with the École Pratique des Hautes Études, in Paris, is a man with manifold responsibilities as a teacher, investigator, and administrator. The new edition of the useful International Directory of Psychologists (Royal Van Gorcum, Assen, The Netherlands, 1966) indicates his primary current interests as measurement theory, psychology of individual differences, and educational psychology. Kurt von Sury, our next author, is a Swiss, born in Basel, in 1882, where he earned his MD. In psychology and psychotherapy his orientation is "analytic" (in C. G. Jung's sense). He has devoted much energy to the Dictionary, now appearing in a new (3rd), substantially enlarged edition. R. J. Herrnstein, who supplied the introduction to J. B. Watson's Behavior, our last book on the list, is well known to his professional colleagues and to college students as the co-editor, with E. G. Boring, of A Source Book in the History of Psychology (Harvard U. Press, 1965).

The reviewer, Josef Brožek, has been interested in the history of psychology and in "psychology abroad" since his student days at Charles University in Prague (PhD 1937). In recent years this hobby has become his major concern. He will direct, with R. I. Watson, an NSF supported Summer Institute in History of Psychology for College Teachers (University of New Hampshire, Durham, N. H., 17 June-July 26, 1968).

IN REGARD TO this particular shelfful of books, the sources of variation are, in part, linguistic: two of the volumes are in English, one in French, and three in German. The fact that Nyman's work was first written in Swedish, translated into German in Denmark, and published in Switzerland adds to the international character of the materials at hand. In size, the books vary from Reuchlin's brief outline (127 pp.) to the Misiak-Sexton 500

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pages of *History*. But more important are the differences in aim and content.

Watson's *Behavior* is a reprint of a 1914 presentation (selective, to be sure) of comparative psychology. From the point of view of the general history of psychology, of special interest is the introductory chapter containing a 1913 formulation of "psychology as the behaviorist views it."

The *Dictionary*, edited by v. Sury, is of direct relevance in the present context because of the "Biographic and Bibliographic Data on Deceased Psychologists" (pp. 287-324), appended to the third edition of the *Wörterbuch*.

The Misiak-Sexton *History*, Nyman's *Schools*, and Reuchlin's *Histoire* are "overviews"—selective portraits of the development of scientific psychology.

Contrary to the hopes of some (and the expectations of many) of its potential readers, Pongratz's presentation is organized not around specific problems but around a problem, be it—at least from the author's point of view—a central problem: the subject matter of psychology.

HAVING clarified the general nature of the materials before us, let us take a closer look at each of them.

Wörterbuch. Individuals concerned with psychology's past, time and again, experience the need for readily available biographical and bibliographical data. They owe a vote of thanks to Willy Canziani who, as collaborator of Kurt v. Sury, prepared for the *Wörterbuch* brief entries on some 150 outstanding deceased psychologists. About 62% of them are German-speaking, 11% French, 9% American, 6% English, and 4% German-American.

Behavior. One of the continuing responsibilities of historians of science is to make available the classical contributions and to keep them in proper perspective, which shifts with time. R. J. Herrnstein did this for Watson's *Behavior*, published in 1914, an important but not one of Watson's most frequently cited works. It is eclipsed, as a behaviorist document, by the 1913 programmatic paper on "Psychology as the Behaviorist Views it" and the 1919

book-length, systematic presentation *Psychology from the Standpoint of a Behaviorist*. Actually, the 1913 paper is included as Ch. 1 of *Behavior* under the bland title, "Psychology and Behavior."

In his introduction the editor says relatively little about the book itself but focuses on 3 broader issues: the growth of objective psychology (with special reference to the Russian scientists: I. M. Sechenov, I. P. Pavlov, and V. M. Bekhterev) in which Watson forms an important link, at least with reference to the American scene; Watson's biography; and the main roads of post-Watsonian behaviorism identified with the names of E. C. Tolman, C. L. Hull, and B. F. Skinner. This reviewer has felt that Watson's "conversion" to conditioned reflexes was not presented as fully as one might wish and that, in particular, the role of Bekhterev and his *Objective Psychology* (the book was not even mentioned) was not given proper consideration.

But back to Watson: The "topography" of comparative psychology is outlined in Ch. 2, viewed as the sketch of "a program for unified and systematic work" (p. 29). The problems are grouped into four classes: sensory functions (4 chapters), instinctive responses (2 chapters), learning (4 chapters), and correlations of the data on behavior with those of the anatomy and physiology of the sensory organs and the central nervous system. Scarcity and limitations of the available data on structure and function (behavior), not disinterest on Watson's part, accounts for the fact that a chapter on the physiological bases of behavior is missing. Watson felt (footnote, p. 55) that "It needs to be emphasized here that training in behavior should be accompanied by training in histology, physiology, and experimental zoology, and preceded by training in chemistry and physics."

A chapter (Ch. 3) is devoted to apparatus and methods.

The historian concerned with general trends in psychology rather than with comparative psychology as such will read with special interest Chapter 1 (referred to above) and Chapter 10, entitled "Man and Beast." In Ch. 10 the point is made that the science of behavior need not change its methods and

principles in passing from simple forms of behavior to more complex ones. And while there are some differences in the receptor and motor equipment, "the chief difference between the behavior of man and animals flows out of man's ability to form language habits" (p. 322). To Watson, language is a system of "abbreviated or shorthand behavior signs" (p. 15). This formulation preceded by many years I. P. Pavlov's concept of the second (symbolic, principally verbal) "signal system" a distinctive human characteristic.

Problemgeschichte. Out of all volumes under review, the title Pongratz's volume on problem-oriented history is apt to strike most readily a responsive chord among research psychologists, typically interested in a relatively narrow area, explored in depth, including (though not so typically) the historical depth dimension. The book suggests a German equivalent of the outstanding collection of histories of specific selected research problems, entitled *Psychology in the Making* and edited by Leo Postman (New York: A. Knopf, 1962, pp. xxxiv + 785).

In the recent German literature, Wolfgang Metzger's *Psychologie* (Darmstadt: Steinkopf, reprint of the 1954 ed., pp. xx + 407, 1963) is also problem-oriented, but in a different way. The focus of Metzger's work is indicated by the subtitle: *The Development of Psychology's Fundamental Assumptions since the Introduction of the Experiment*. This is a general theoretical psychology, rooted in the Gestalt principles, but not lacking in factual documentation. It offers a constructive critique of such fundamental concepts ("problems") as wholes and parts, patterns and associations, stimulus and response, purposes and causes, the phenomenological ("man in the world") and the physiological approach ("the world in man").

Pongratz's presentation, while certainly not a-theoretical, is conceived, definitely, as a *history* of psychology.

In the author's view there exists a dynamic, ever changing relation between the historical past and the present: as science advances, we address new questions to history. This places established historical facts in a new perspective (and may lead to the discovery of new historical

facts). In turn, the altered view of the past affects our comprehension of the present and aids us in the solution of the current problems. Furthermore, since the ever-receding present is co-determined by the past, may not the prediction of the future course of science constitute the single most important contribution of research on the history of science? Unfortunately, the progress of science is discontinuous with occasional plateaus, fluctuating rates of advance, and not infrequent changes in the direction of the central attack. Problems regarded by one generation of scientists as basic may be pushed aside by the next generation. On the other hand, a problem may lay dormant for some time only to emerge again, later seen in a different perspective and frequently given a new name.

Of the three general themes around which a problem-oriented history of psychology could be organized (the "what" of subject matter, the "how" of method, the "why" of theory), Pon-gratz has chosen to place the dominant emphasis on the *what* that psychologists, from the Greeks up, thought "psychology" was all about. He seeks in Wilhelm Salber's work (*Der psychische Gegenstand*, 1959) support for the belief that this is and has been, historically, a significant issue.

The volume consists of 3 parts, each subdivided into two sections, each dealing with a set of polar concepts: soul as a substance—psychological functions, consciousness—the unconscious, experience—behavior.

Throughout, the author brings the story up to the present. At times this calls for a bit of ingenious conceptual maneuvering as when he treats *Person* (and personality) as the linear descendant of the concept of the soul. As a consequence, the section on *The Soul* can happily end with the account of the work of such men as William Stern (who specifically negated the concept of soul as a substance), Gordon Allport, and J. P. Guilford, with Russian and Soviet (S. L. Rubinshtein) views on personality added for a good measure.

There are other examples of what will appear to some readers as a *tour de force*, e.g., placing the account of the differentiation between motor and sensory nerves (p. 61) or comment on

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COMPUTORS AND ELECTRONIC DEVICES IN PSYCHIATRY

Edited by Nathan S. Kline, M.D. and Eugene Laska, Ph.D.
*Research Center, Rockland State Hospital,
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The recording, storing, retrieval and analysis of information about psychiatric patients both in mental hospitals and community mental health centers may well constitute the next major step in the rapidly changing practice of psychiatry. An understanding of the purposes and methods whereby this will come about is crucial for those who not only wish to understand the current scene but to influence its direction.

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Pavlov's "physiology of higher nervous activity" (p. 63) in the section on *Seelenleben*. And again, the description of a mass migration of the elite among the German psychologists into the U.S.A. is given in the section on behavior (p. 340).

Some critics will argue that the introspectionist approach is represented in Pongratz's scheme of things psychological not once, not twice, but three times: first under *Seelenleben* (mental functions), secondly under *Bewusstsein* (consciousness), and thirdly under *Erleben* (experience). On the other hand, a physiological ("molecular") interpretation of organismic activities, as a separate "subject matter" category, differentiated from extrospectionist S-R psychology no less clearly than from the introspectionist approaches, is lacking.

The reader, especially an American reader, will be prone to argue with the author on other counts. But he will find much that is new to him, both in the text and in the extensive references (especially as regards the German literature). Under the guise of discussing various views of what constitutes the subject of psychology—to the contemporary American ear, not a terribly exciting topic—the author manages to present an interesting portrait of the development of the main varieties of scientific psychology. For Pongratz, the history of science is an essential part of the inquiry into the foundations of science (*Grundlagenforschung*), significant for present-day research and important for teaching psychology.

The remaining three books are of the more traditional textbook variety.

Histoire. Reuchlin's *opusculum* was first published in 1957, in the popular series "Que Sais-Je." In ten years it had gone through 5 editions—not a bad record! The present edition is "revised and brought up-to-date" but not essentially enlarged.

The author is impressed by the necessity of specialization, no less pressing in science than in industry, and approaches his task in this perspective. In six brief chapters he takes up, in succession, the general experimental, animal, differential, clinical, child and social psychology.

In spite of its purposefully limited

size, the volume contains an impressive amount of information. The American reader will find of interest, in particular, those passages which deal with the developments in France, from the early work by Bouguer (*Traité d'optique sur la gradation de la lumière*, 1760) developing, 100 years before the appearance of Fechner's *Elemente der Psychophysik*, the concept of just noticeable differences, through the work of French experimental psychologists (Piéron), the study of individual differences (Binet), applied psychology, including vocational guidance (cf. Reuchlin's *L'orientation pendant la Période Scolaire: Idées et Problèmes*, 1964) and psychopathology (Ribot, Janet, Dumas) to child psychology (Piaget, Wallon) and cultural psychology (*psychologie historique* of I. Meyerson).

Die Schulen. Nyman's textbook is conceived as an introduction to the principal trends in the psychology of the 20th century. The psychology of the 1880's and 1890's is characterized as 1) subjectivist (inner experience as psychology's subject matter, introspection as its method); 2) atomistic (search for elements); 3) stimulus-bound (assumption of a constant relationship between stimuli and perceptions); 4) separating sharply the sensory modalities, in the spirit of Johannes Müller's law of specific nerve energies; 5) mechanistic (the elements of consciousness being built up into more complex units through the process of association); and 6) both general (the psychology of the standardized "average man") and individualistic (in the sense of studying man in isolation from his social milieu).

The new trends are presented as protest movements. The presentation is centered around the traditional "schools"—behaviorism, gestalt psychology, psychoanalysis, and the Adlerian *Individualpsychologie*—to which four other "psychologies" are added, each treated in a separate chapter: 1) Charles Harts-horne's "doctrine of affective contiguity" (*The Philosophy and Psychology of Sensation*, Chicago, 1934); 2) factor analysis, with the references spanning a twenty year period, from C. Spearman's 1927 *Abilities of Man* to L. L.

Thurstone's 1947 *Multiple-Factor Analysis*; 3) the typological variety of personality theory ("characterology," with E. Kretschmer as the chief protagonist to which most of the appended illustrations are devoted; and 4) social psychology ("psychology of masses and groups") the presentation of which is based almost solely on American and English sources, with the exception of two early French references (G. Bon, *Psychologie des Foules*, 1895 and G. Tarde, *L'opinion et la Foule*, 1904).

It is not a facetious question to ask whether the translator did really a favor to the author by translating the work into German. The volume, in the Swedish original, played a useful role as a historical introduction to contemporary psychology. It was read widely, as indicated by the fact that it appeared in several editions. We are informed in the author's *Foreword* to the German edition, that the section on factor analysis was incorporated in the fourth edition but we look in vain for information concerning the year of publication of the first edition or the edition from which the translation was made. Perhaps the best indication of the "value" of the body of the work is the fact that all the reference cited in the bibliography appended to the first chapter on "Old and New Psychology" were published between 1929 (2nd ed. of K. Bühler's *Die Krise der Psychologie*) and 1932. This was, for the author, a period of high productivity, as documented by the publication of his experimental studies on thinking (*Schema och slutsats*, in Swedish, 1928) and a consideration of the problem of the unconscious (*Über das Unbewusste*, in German, 1929; *Frågan om det Omedvetna*, in Swedish, 1933). The typology of the Marburg psychologist Erich Jaensch, strongly colored politically, was considered critically in Nyman's *Nazism, Caesarism och Bolsjevism* (Nazism, Caesarism and Bolshevism, in Swedish, 1941). This topic is not taken up in the *Schools*.

A translation into English is not recommended.

History. The Misiak-Sexton opus is intended to serve as a textbook, useable both at the undergraduate and at the graduate level. In the author's terms, "The book does not aspire to be either a novel conception or an exhaustive presentation of the history of psychology. It rather seeks to provide an unbiased overview of basic facts and con-

cepts related to the roots of scientific psychology, the development of psychology in various countries, and to psychological theories" (Preface, p. VII).

However, the authors' disclaimer is more sweeping than is necessary or justified. Yes, exhaustive presentation is neither attempted nor achieved. But novelty is not lacking, either in conception or in the mode of presentation.

Using an ingenious combination of lines (including cross-hatching) and shading, the authors managed to squeeze into a one-page synopsis a remarkable amount of information on psychology's roots in philosophy and science, and on its development. The growth of modern psychology is followed through three periods: 1) the "transitional" period (Bain, Fechner, Lotze), 2) the period of pioneers—in Germany, France, and the United States, and 3) the period of theoretical and thematic growth (systems and fields). The influences of philosophical thought and of other sciences (neurophysiology, cybernetics, ethology, pharmacology) are traced into the 20th century. The synopsis could be—and, we predict, it will be—enlarged for use as a wall chart.

Appended to the text is a useful bibliography of major works on the history of psychology published after 1900 and classified into 5 categories (general treatises, psychology in America, psychology abroad and during specific periods of history, theories and systems, readings, and histories of psychology written in German and French and not available in English translations). This is in addition to the selected references which follow each of the book's 23 chapters.

Aware of the importance of the exchange of scientific information across the barriers of language and state line, the authors provided data on a variety of international bodies in psychology and on the 18 international congresses of psychology and the 15 international congresses of applied psychology.

The presentation of topics, not covered in the available textbooks of the history of psychology includes the growth of American psychology in its organizational, professional aspects; development of important new areas and, specifically, of clinical psychology; psy-

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chology in Asia; post-World War II developments in psychology in Germany; and the emergence of phenomenological and existential psychology.

The teacher and the student alike will find valuable the summaries of individual chapters, presented in the form of "highlights" (consisting of brief statements, organized chronologically, e.g., 1913 Behaviorism officially introduced with publication of Watson's paper "Psychology as the Behaviorist Views It.") or of tabular presentations (e.g., the listing of Wundt's students, by country and with the indication of university association).

The volume is divided into 3 parts, entitled *Roots of Psychology* (about 80 pages), *The Beginnings and Growth of Scientific Psychology in Various Countries* (240 pp.), and *Theoretical Psychology* (150 pp.). To the "roots" in the subject matter of philosophy (empiricism, associationism, doctrine of psychophysical parallelism) and physiology (peripheral and central nervous system, special senses, internal environment) the authors add, as a third "root," scientific methodology (introspection, psychophysics, experimentation, psychometrics, statistics). Interaction with other areas of science, basic (physical, biological, social) and applied (education, psychiatry), is viewed as important to the growth of scientific psychology.

The second part contains 3 sets of 3 chapters each devoted to psychology in Germany, in the U.S., and in some of the other countries and areas (Western Europe, Soviet Union, Asia). A separate chapter deals with the development of clinical psychology.

The third part is organized in terms of systems (structuralism, functionalism, Gestalt and holistic psychology, psychoanalysis), with phenomenological and existential psychology added for a good measure. A chapter on "Retrospect and Prospect" closes the volume.

Even though the treatment is selective, the authors attempted to bring the book up-to-the-minute. But there are limits to what can be achieved in this respect.

THE times simply are moving faster than textbooks can be written. E.g., the

APA has added a number of new divisions to the 24 divisions referred to in the book. Importantly, one of the new divisions, Division 26 (History of Psychology) has been established (in 1965) in response to the growing professional interest in the very field covered by the book.

More serious are the errors that, unavoidably, creep into works that require the handling of large amounts of literature, not all of which can be examined first-hand. Some of these errors and omissions will be identified, in time, by the authors themselves, others will be brought to their attention. They can be corrected in the next edition.

Two final points: 1) The authors buried mental chronometry a bit too eagerly and too definitely. While the fractionation of complex mental activities into elementary "components" is indeed a hazardous undertaking, time is a basic parameter of all organismic activities, including those of recognition and discrimination. It is a fact, and it is an important fact, that as the complexity of a task increases, the response time increases as well. Furthermore, we find a 1967 (not 1867) paper by Michael I. Posner and Ronald F. Mitchell, entitled "Chronometric analysis of classification" (*Psychological Review* 74, 392-409) which opens by referring to Donders' 1868 paper and lists a whole series of recent experimental studies reported by other authors, testifying to the rebirth of the interest in studying the time characteristics of cognitive operations à la Donders. 2) The authors state, without giving the reference, that Külpe criticized in 1893 the endeavor to view complex mental processes as a sum of simpler processes. While the undergraduate student will be satisfied by the bare statement, an inquisitive, interested graduate student may wish to read what Külpe had to say. The absence of bibliographic information will frustrate him or, if he is persistent, will unnecessarily complicate and delay his endeavor to familiarize himself with Külpe's criticism in greater detail and at first hand.

There are matters on which the reviewer would wish to comment critically if he were using the volume as a textbook. They are not "errors" in the bookish sense but call, nevertheless, for rethinking. Thus when one refers to the physiology of higher nervous activity, pioneered by I. P. Pavlov, it appears to be more confusing than illuminating to apply the label "psychophysiology" (p. 258). The term has not

been used in the Soviet Union in this sense, while in the West it has acquired a specific meaning (area of psychological research utilizing the measurement of physiological functions, such as heart rate, blood pressure, gastric motility, eye movements, size of the pupil, and electrical activity of the muscles and the brain; cf. P. H. Vables and Irene Martin, *A Manual of Psychophysiological Methods*. New York: Wiley, 1967).

It is misleading to say (p. 258) "After 1917 Pavlov had been regarded as physiologist" (italics ours) since he was so regarded also prior to 1917. And while Pavlov's influence has been felt in Soviet psychology (especially after 1950 when a vigorous attempt, *ex machina*, was made to make it felt), it is hardly appropriate to place him at the very top of the list of "leaders" in Soviet psychology.

Notwithstanding these criticisms in detail, the book will serve well the purposes for which it is intended. Its widespread adoption as a textbook can be predicted with confidence.

Concept: A Disjunctive Category

Herbert J. Klausmeier and Chester W. Harris (Eds.)

Analyses of Concept Learning.
New York: Academic Press, 1966.
Pp. xiii + 272. \$8.50.

Reviewed by SAM GLUCKSBERG

Both editors, Herbert J. Klausmeier and Chester W. Harris, are at the University of Wisconsin; Klausmeier is Professor of Education in the Research and Development Center for Learning and Re-Education, and Harris is Professor of Education in the Department of Educational Psychology.

The reviewer, Sam Glucksberg, is As-

sociate Professor of Psychology at Princeton University. His PhD is from New York University. He started as a Gestaltist working on problem solving, especially interested in analysis of functional fixedness, and ended up as cognitive S-R type still interested in problem solving, concept formation, and language behavior. He wrote a chapter, "Symbolic Processes," in Vernon's Introduction to Psychology, and is an associate editor for American Scientist.

A DISJUNCTIVE concept is characterized by *or* relationships: *X* is an instance of concept *Y* if *X* possesses any one or more of the attributes *A*, or *B*, or *C*. If the papers which comprise this volume, all prepared for a conference on concept learning, are taken as providing instances of the concept *concept*, then that concept is clearly disjunctive. The experimental literature suggests that such concepts are difficult to attain, and one often gets the feeling that 'something there is that dislikes disjunctive concepts.' In this sense, this book is intellectually irritating. This diverse collection of papers seems to cry out for integration and synthesis, or at least for some attempt to juxtapose points of view in terms of similarities and contrasts.

The introductory chapters by Harré and Merrifield are excellent in their own right, but do not refer to any of the ensuing chapters. No discussion of any of the chapters is presented, and the only overview of the conference is the editors' descriptive preface, which serves as an annotated table of contents. There is little evidence to suggest that the conference participants talked to one another, or that, if they did, listened to one another. For example, Ausubel presents a strong case for meaningful reception, as opposed to discovery of learning as the prime educational technique. Suchman, in the very next chapter, asserts that "one comprehends best that which he has struggled to understand in his own terms" (p. 181). Neither author deals with the issues raised by this apparent contradiction. Indeed, as if to underscore the lack of dialogue, Archer refers to papers from an earlier conference as the starting

point for his discussion of the psychological nature of concepts.

IN other respects, this book has considerable merit. First, the papers, taken individually, are generally first rate. Second, as a group, they provide an intriguing exercise in concept attainment for the reader. What is one to make of the lack of systematic taxonomy represented by this collection?

The papers are divided into four sections: schemes for classifying and relating concepts, learning of concepts, learning-teaching processes, and concepts in various subject matter fields. Throughout these four sections, however, two major classes of definitions of the term *concept* can be distinguished: technical ('scientific,' as some would have it) and programmatic. The technical definitions are those which are restricted to categorizing or classifying behavior. The programmatic definitions refer, in more or less general terms, to characteristics of mental life which need not be restricted to categorizing behavior. Each of these two classes of definitions may, in turn, be classified into two sub-categories: concepts as content, as opposed to concepts as processes.

Among the technical definitions, Archer's view of a concept as a category label or, more generally, as a representational response, is an instance of concept as content. Gagné prefers to think of a concept as an active process permitting classification behavior. The programmatic definitions can be similarly classified. The papers concerned with concepts in subject matter fields, such as English or mathematics, implicitly treat concepts in terms of content; concepts refer to knowledge to be acquired. In contrast, programmatic definitions deal with concepts as particular forms of activities having specific functions. Concepts are the vehicles of thought (Harré), or the agents of intellectual life (Kagan), or organizers of incoming and stored information (Ausubel; Suchman).

In both technical and programmatic terms, of course, concept as content can serve functions, e.g., a concept as a set of common associates to different stimuli (Underwood) can influence sub-

sequent learning. Still, the fourfold classification outlined above, together with the examples provided by this volume, suggest rather strongly that one man's concept is another man's trivia. For this reason alone, it is unlikely that the various treatments of concept can be reduced to an underlying set of theoretical principles. This in no way implies a rejection of a nomothetic approach. Rather, the concept categories suggested here merely reflect various areas of theoretical and pragmatic concern, and thus do not serve as a prototypical theoretical taxonomy.

In the absence of such a taxonomy, workers in the global, undifferentiated area labeled *concept learning* may find it useful for communicative purposes to agree upon a quasi-technical vocabulary which would clearly represent their various areas of interest. To refer to *dog*, *justice* and *cardinal number*, as well as to *symbolic mediator*, *perceptual mediator* and *integrative organizer* by the single term *concept* is to ensure confusion and misunderstanding. Until a differentiated descriptive taxonomy is developed, this kind of volume will be typical: a collection of discrete papers whose primary unifying attribute is a concern with a number of things sharing a common label, viz., concept learning.

As such a collection, the volume represents a successful attainment of the editors' goals, to bring diverse knowledge to bear upon 'concept learning.' In its own right, and in its own terms, this volume should prove useful to both advanced undergraduates and graduate students. It is, as the editors intended it to be, an informative sampler of approaches to a variety of problems in the area of conceptual behavior.



The human species can be construed, to use a piquant figure of speech, as carcass-things that function.

—JOHN MONEY



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It's a Superordinate Puzzlement

Muzafer Sherif

In Common Predicament: Social Psychology of Intergroup Conflict and Cooperation. Boston: Houghton Mifflin, 1966. Pp. xv + 192.

Reviewed by SEYMOUR ROSENBERG

The author, Muzafer Sherif, is Professor of Social Psychology and Director of the Psychosocial Studies Program at The Pennsylvania State University. He formerly was Chairman of the Department of Psychology at the University of Oklahoma. He is author of *The Psychology of Social Norms*, *Social Judgment* (with Carl Hovland) and with Carolyn Sherif, of *Reference Groups*. He is currently a Guggenheim Foundation Fellow and the recipient of the 1967 Kurt Lewin Memorial Award.

The reviewer, Seymour Rosenberg, is Professor in the Department of Psychology at Rutgers University. He received his PhD from Indiana University in 1952 and went to the Human Resources Research Center in San Antonio, spent a year teaching at the University of Kansas, and then, in 1959, went to the Bell Laboratories. In 1965 he was visiting professor at Columbia. He decided to stay with academia—hence Rutgers.

WE are told by Rashevsky that in 1939, Lewis F. Richardson submitted a paper on arms races to an American journal and urged that it be published immediately because its publication might prevent an impending war. The paper was rejected but few if any contemporary scientists believe that its publication would have altered the course of events that followed. Many of them, however, share with Richardson the strong conviction that scientific knowledge can help to prevent devastating international conflicts.

Since World War II an increasing number of scientists—biological, physical, and social—have begun to speak out in conferences, in books, and in new periodicals devoted to the problems of maintaining peace and resolving conflicts. Scientists from the various disciplines provide not only their specialized vantage points but also seek, through interdisciplinary approaches, to gain a more comprehensive understanding of these problems.

Professor Sherif, with his long-standing interest in intergroup relations and the several social sciences that such an interest implies, has added his thoughts to the problem of alleviating current intergroup problems. *In Common Predicament* outlines a social psychology of intergroup conflict and cooperation which attempts to encompass the factors that enter into any particular case or type of intergroup relations. As such it is relevant not only to international relations but also to economic, industrial, political, and racial relations within nations. Nevertheless, it is clear that what is of paramount concern to Sherif are ways of averting armed conflict and a global nuclear holocaust.

THE READER will not find a social psychology in the sense of a systematically laid out set of principles. It is not that the book fails to touch on many important aspects of intergroup relations, but the writing is as much polemical as it is expository. To cite but one example, which is typical: "The fatal er-

rors in the mathematical and economic models [of deterrence], as well as the tragic blunder inherent in deterrent concepts . . . result from appalling ignorance of the social psychology of man's behavior in groups" (pp. 117-118). In psychology, the author takes issue with certain theories, e.g., the classical psychoanalytic theory of aggression and the strong form of the frustration-aggression hypothesis, and with certain research methods. It is perhaps as part of a persuasive style, or simply poor organization, that a number of points and caveats are repeated many times throughout the book, although with much eloquence and felicity each time.

As the author views it, intergroup conflict is not the result of a few aggressive or deranged leaders. Antagonisms arise instead when the interests and goals of one group are incompatible with those of another. These rivalries, in turn, shape the attitudes of group members toward themselves and others. Group stereotypes are the result, not the *initial causes* of enmity between peoples. Moreover, group attitudes are not merely peripheral aspects in the lives of individual members of a group. These attitudes can at times arouse stronger passions than events in an individual's 'personal life.'

The onset of intergroup antagonism is often only a prelude to a vicious cycle of self-defeating and mutually destructive processes. The author, like other writers concerned with intergroup hostility, has described the typical patterns: the casting of blame by one group leads to counteraccusation by the other, threat leads to counterthreat, armaments lead to more armaments. We need but to sample from any of the news media to observe these patterns.

The results of three intergroup "experiments," conducted by the author and his associates at different times during the past 18 years, are also cited to support the author's propositions. Each study was conducted with 11-12 year-old boys living at a camp site and lasted approximately three weeks. In each study, hostile acts and attitudes between two groups of boys followed the establishment of goals that only one group could attain. This work,

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while salutary for its attempt to study intergroup behavior in real-life situations, is suggestive rather than definitive. That is, although the studies demonstrate one sufficient condition for the rise of intergroup hostilities, they do not rule out the existence of other sufficient conditions, e.g., cultural, physical, and economic differences between groups. Also, in the absence of controls, it is difficult to ascertain what features of the experimental situation were responsible for the results obtained.

How can conflicts, once aroused, be reduced? Sherif's proposal is that cooperation can replace conflict if the groups are directed to "superordinate goals." Superordinate goals are goals "that have compelling appeal for members of each group, but that neither can achieve without participation of the other" (pg. 89). That is, a superordinate goal transcends other goals each group may have. In one of the experiments with the young boys, the establishment of a series of superordinate goals dramatically changed the relationship between the two groups.

In current international affairs the superordinate goal is human survival — the common predicament of all mankind. The notion of superordinate goals as a constructive approach is at once both simple and cogent. It is also obvious that nations, while acknowledging their common predicament and the advantages of cooperation, have made only fitful progress in settling basic conflicts. What is not so obvious, then, is how Sherif's prescription, for all its validity, can be turned into practice. The reader, while not expecting a detailed blueprint for action, will search in vain for any concrete proposals. The final chapter, "Creative Alternative to the Predicament," aside from pointing to certain forms of international cooperation and constructive alignments that now exist, says little more than the material covered in previous chapters. We must await a promised future publication that will spell out in more detail how nations can achieve what is truly in their own national interests—a stable peace.

PERSONALITY THEORIES

a comparative analysis

by **SALVATORE R. MADDI**, University of Chicago

Personality Theories: A Comparative Analysis is a book that compares and contrasts many specific theories of personality; it is neither an eclectic summary nor a partisan treatise on one position to the exclusion of others. It is a systematic inquiry into the presuppositions that mark theories as examples of certain models of the nature of personality and living, an important and needed frame of reference for research in this field. Utilizing each theorist's own frame of reference and terminology, sixteen theories are explored from men such as Freud, Murray, Erikson, Sullivan, Rank, Angyal, Bakan, Adler, White, Allport, Fromm, Kelly, McClelland, and Fiske and Maddi.

The organization of the book derives from the emphasis upon comparative analysis. The parts of the theories concerning man's common, inherent nature, or *core of personality*, are discussed apart from the portions dealing with individuality in life style, or *periphery of personality*. Statements about development, or that which links inherent nature with individual expression, occur in sections on *core and periphery*. The presentation of theories is carefully separated from the logical and empirical analysis of the issues which distinguish them. The book concludes with what a good theory of personality should be; a guide to future research after some knowledge of current practice has been gained. Organization is intentionally flexible so that it is possible to study all aspects of one theory at one time, if so desired.

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Controversy: Fertile and/or Futile?

James M. Vanderplas

Controversial Issues in Psychology. Boston: Houghton Mifflin, 1966.
Pp. 448. \$7.50.

Reviewed by JOSEPH R. ROYCE

The editor, James M. Vanderplas, received a 1951 PhD from the University of Texas, has worked for the Air Force and is at present Professor in the Department of Psychology, Washington University. His interests are in perceptual learning and transfer, visual perception, and human engineering.

The reviewer, Joseph R. Royce, is Director of the Center for Advanced Study in Theoretical Psychology and Professor of Psychology at the University of Alberta, Edmonton. He received his doctorate with Thurstone at the University of Chicago. He is a general theoretical-experimental psychologist with special interest in extending factor theory to the domain of comparative-physiological psychology. He is author of *The Encapsulated Man* and editor of *Psychology and the Symbol*. He is an associate editor of *Multivariate Behavioral Research* and of *Psychological Record*.

WHAT problems would you include if you had the task of compiling 35 readings covering 12 controversial issues in the entire domain of psychology between the years 1885-1960? Vanderplas selected 5 issues in the area of learning, one each in the areas of perception, statistics, psychoanalysis, and general, and three of historical significance. The latter deal with sensory vs. motor set in reaction time (Titchener, Baldwin, Angell), the early systematic position of the struc-

turalists (Titchener), the functionalists (Angell), and the behaviorists (Watson), and the James-Lange vs. the Cannon-Bard theory of emotion. Three of the five learning issues—transposition of discrimination learning (Spence, M. K. Harlow, Riley), continuity (Spence) vs. non-continuity (Krech), and discrimination vs. association in perceptual learning (J. J. and E. J. Gibson, Postman, Wohlwill) can be seen as *special* cases of the more general problem of S-R vs. cognitive theory. The other two issues can be seen as *general* cases of the S-R-cognition debate, the reinforcement-perception section (Woodworth, Murphy, Garner-Hake-Erikson) attempting to provide a rapprochement by focus on the reinforcement of perceptual resolution as the key to learning, and the Rozeboom-Kendler issue attempting to deal with the question *What is learned?* Kendler concludes this is a pseudo-problem which takes us down a theoretical blind alley because of reification of constructs, whereas Rozeboom concludes that the present theoretical confusion is due to an incomplete empirical foundation, but that the question is, in principle, theoretically sound.

IT is no surprise to find psychoanalytic theory included in a volume on controversial issues. The affirmative case is presented by Frenkel-Brunswick

and the negative by B. F. Skinner. The third party, the philosopher Richfield, points up the futility of the controversy in psychoanalysis to date. My view on this issue is that psychoanalysis is neither clearly science nor clearly non-science, but a very unclear mixture of both the scientific and the humanistic and that this particular controversy will not get beyond its present highly affective tone until we see both the sciences and the humanities as valid knowledge-making processes and get on with the business of teasing out how these two approaches operate with psychoanalytic thinking. None of the three papers does this.

The tricky and treacherous relationships between numbers, scales, statistical tests, and permissible inferences are briefly alluded to in the papers of Frederic Lord and F. L. and R. Behan. This is much too brief a coverage for some extremely difficult and subtle issues.

Perception per se is obviously inadequately represented. It is, in fact, included only in a secondary sense, tied to learning on the one hand on issues of perceptual learning, and tied to unconscious processes (Lazarus and McCleery, C. W. Eriksen), on the other hand, under the rubric of subception. This is an unfortunate weakness in the light of the present resurgence of research activity in this area. In short, as I see it, learning is over-represented and perception is under-represented.

THIS kind of value judgment brings us back to where we started—what issues and readings should be included in such a compendium? Vanderplas admits that his selections are idiosyncratic, that they reflect an unrepresentative, biased sampling of controversial issues. Since the editor's compilation was based essentially on his personal interests, I predict the reactions of readers will also be highly idiosyncratic. This means, for example, that specialists in the areas of social psychology, personality, and psychophysiology will find little of interest, whereas the learning theorist will find more here than any other specialist.

The generalist will find this compilation of moderate interest, but he

will be critical of its obvious imbalance. And part of the imbalance has to do with the scope of the issues selected as well as area coverage. The generalist would say that most of Vanderplas's selections are area-bound; that such issues should be included, but that the editor has omitted the really big issues, those that shake the foundations of the discipline as a whole. Let me cite several examples. First, there are those of a contemporary, "hot" flavor: actuarial vs. clinical prediction, experimental vs. clinical psychology, scientific vs. humanistic psychology, the relevance of mathematical models in a relatively immature science, the relevance of "imported" models (e.g., computers, information and communication theory, game theory, etc.). Second, contemporary issues with a long past: the role of phenomenology in psychology, what are the limits of operationalism and logical positivism for our discipline?, and the empty organism vs. neurologizing. Third, historical issues: brain mechanisms and behavior (e.g., mass action vs. localization), and the role of factor analysis (e.g., what are factors?).

EVEN more crucial than the questions of coverage and scope is the more fundamental one of "why this book at all?" Vanderplas's *raison d'être* is "whether controversy is necessary, unnecessary, or futile, it exists" . . . and "controversy, by its very nature, tends to support progress in science." How might controversy help us? Presumably by clarifying the big issues which lie unspoken in experimental reports and hidden underneath theoretical jargon. Clear and crisp analyses of what's what would allow us to focus on fundamentals and conduct more meaningful empirical research. While it is doubtful that the hard core of this view can, or should, be demolished, I have strong doubts about its value *at this stage of our development*. My point is that "controversy" is about all we've got in psychology, but unfortunately, not at the advanced level of mature theory such as quantum theory vs. particle theory in physics. In my judgment, what we need is less controversy of the relatively trivial kind which has

characterized our discipline to date and more meaningful conceptualization and theoretical synthesis in relatively circumscribed domains of study. Perhaps the major research value of a book of readings such as this is to hold up the mirror of reality, to allow for realistic self-assessment. If so, I see value in it, for it is a fair reflection of the mess we are in.

Let me end on a controversial note in the spirit of Vanderplas's compendium. My personal box score on the 12 issues is as follows: Cannon over James, the Gibsons over Postman, Rozeboom over Kendler, a draw on S-R vs. cognition in the sense that S-R theory seems capable of handling relatively simple learning and cognitive theory does the job better for more complex tasks, complete boredom regarding the reaction time "issues," bouquets to Boring and Dallenbach (the generalist selection), both of whom are right, and to the 6 authors of selection 8 on the reinforcement of perception, and brickbats to systematists Titchener and Watson, who were all wrong (ah hindsight!). I offer brickbats as well to most of the writings on psychoanalysis, and suspended judgment on the remaining issues. Now you have my score card in front of you, and perhaps your own, as well as the original papers to refer to. Question: What difference does it make? Does all this settle any of these controversial issues? What does settle them?

Establishing Anchors in Reality

E. Paul Torrance

Constructive Behavior: Stress, Personality, and Mental Health. Belmont, Calif.: Wadsworth, 1965. Pp. vii + 432.

Reviewed by CARSON MCGUIRE

The author, E. Paul Torrance, now is Chairman and Professor of Educa-

tional Psychology at The University of Georgia after eight years at The University of Minnesota. Earlier books are Guiding Creative Talent (1962; CP, Sept. 1964, 9, 363), Education and the Creative Potential (1963; CP, March 1965, 10, 102), and Rewarding Creative Behavior: Experiments in Classroom Activity (1965; CP, April 1966, 11, 151). His most recent contribution is "Nurture of Creative Talents" in Explorations in Creativity edited by Ross Mooney and Taher Razik (Harper, 1967) which also contains the reviewer's "Creativity and Emotionality."

The reviewer is Professor of Educational Psychology at The University of Texas at Austin, a base from which he has been one of the men instrumental over the past decade in bringing about the changing face of educational psychology as well as the new Zeitgeist for educational research and development in the United States

PAUL TORRANCE, to those who have become accustomed to his works upon creative behavior in children, may appear to be leaping to a new area of concern in his 1965 publications. In addition to *Constructive Behavior*, he combined with a former Director of NEA Project Dropout, Robert D. Strom of Ohio State University, to edit *Mental Health and Achievement: Increasing Potential and Reducing School Dropout* (Wiley, 1965). The selections in the paperback complement the book under review should it be adopted for courses such as "Personality and Mental Health." Such a course frequently is offered as an elective in teacher education, as part of inservice education programs, or for work toward a graduate degree. According to the publisher, nearly a score of colleges and universities have adopted *Constructive Behavior* for such purposes.

THE LINK between Torrance's 1965 publications and prior ones appears to be his notion that the divergent thinker (Guilford), the self-actualizing person (Maslow), the fully-functioning person (Rogers), and the creative person or "highly effective individual" (MacKinnon) share a key personality char-

acteristic. The productive divergent thinker "is not different for the sake of being different but . . . because he has to be different in order to cope constructively with the pressures of his environment and to become his potentialities" (p. 326). He is aware of what Philip W. Jackson in a forthcoming book upon classroom behavior terms "the abrasiveness of the school," asserting "the awesomeness of being different is well understood by most children by the time they reach the fourth grade" (p. 326). The reference is to common themes in stories written by American children illustrated in the first chapter on "meaning of mental health." Torrance believes that, although many children intuitively recognize the fallacy of the concept, they also perceive the pressures of society for the "well-rounded personality" to be quite relentless. Going back to his work in the USAF Survival Training School from 1951 to 1957, he develops a set of generalizations about adaptation to life stresses (illustrated by seven figures in the second chapter) leading to his concept of mental health as "constructive response to stress."

Torrance does not define "constructive behavior" precisely. Nevertheless, he repeatedly associates the absence of the necessary response capabilities with inadequate "anchors in reality." Absences of anchors in reality are illustrated by rather severe losses of contacts with the environment that characterize loneliness (from social isolation or reduced sensory stimulation), monotony, confusion, and overstimulation as well as several types of panic (pp. 34-45). Then he goes on to relate his notion of anchors in reality to the psychoanalytic concept of "ego strength" (particularly its measurement, p. 67), the development of nonparataxic interpersonal relations (using Sullivan's conceptualization with Schutz's FIRO tests and sociometric procedures for measurement, pp. 82-86), and Lois Murphy's "coping strategies" (pp. 193-198) which then are elaborated as adult strategies of coping with stress. Among contemporary approaches, only Piaget and European research in cognitive development appear to be absent in the extensive fourth part of the book which re-

lates mental operations to constructive behavior. Guilford's structure-of-the-intellect model provides Torrance with an initial frame of reference for examining facets of convergent, divergent, and evaluative thinking.

In the hands of an instructor who employs a textbook selectively to orient his students and to open up areas for further inquiry, *Constructive Behavior* may be quite valuable in courses such as those which have a bearing upon "mental health," "special education," or "compensatory education," where the intention is to construct a basis in knowledge for forms of planned intervention into child and human development. One other seminal volume concerned with planned action affecting individuals and groups is Nevitt Sanford's stimulating *Self & Society: Social Change and Individual Development* (1966; CP, August 1967, 12, 390). Although both books are concerned about "person-in-a-social-system," both authors give primary emphasis to the intrapersonal determinants of behavior. Neither author appears to be aware of a quotation from Edward A. Westermarck often employed in lectures by John Dewey: "Social approval and disapproval is the primary ethical fact" (although Torrance comes close in his attention to stress). Psychologists apparently have not attended to Robert Sears's distinction between dyadic and monadic models made so clearly in his 1951 APA Presidential Address. After all, infant organisms become human beings and are permitted to live in interpersonal relatedness only when they learn to behave in terms of expectancies regarding the probabilities of supportive or non-supportive responses to one's actions by cultural agents (parents, age-mates, and institutional agents such as teachers). As the reviewer has written elsewhere, "Our emotions are the price we pay for being human and living with other human beings."

Strangely, Torrance makes no reference to a volume edited by Gerald Caplan, *Prevention of Mental Disorders in Children* (1961; CP, May 1962, 7, 193), or to the concept of "crisis intervention" therein. Otherwise,

Constructive Behavior could have been written as an educational psychology's response to the preface by Robert H. Felix, then the highly-respected director of the National Institute of Mental Health. Dr. Felix urged that increasing attention be given to the tasks of "providing constructive life experiences, developing strengths for coping with normal life crises and special stress situations, examining the impact of personal and group values on psychological development, and recommending social action to help minimize man-made mental health hazards." Torrance's book, like Sanford's, could be a catalytic agent for valuable research in areas where interventions into the lives of human beings are planned. His last chapter, "Education for Constructive Behavior," contains a plea that attention be directed to the new pressures and forms of stress created by changes in the nature of the educational encounter now taking place.

An Essence of Training

Bernard M. Bass and James A. Vaughan

Training in Industry: The Management of Learning. Belmont, Calif.: Wadsworth; London: Tavistock, 1966. Pp. xi + 164. \$1.95 text; \$2.60 trade.

Reviewed by LYMAN W. PORTER

Both authors, Bernard M. Bass and James A. Vaughan, were on the faculty of the Graduate School of Business, University of Pittsburgh, Bass as Professor and Director of the Management Research Center and Vaughan as Associate Professor and Associate Director of the Center. As of May 1 they both moved to the University of Rochester.

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Both are industrial/organizational psychologists heavily involved in research and management development activities as well as teaching. Bass is author of *Organizational Psychology and Leadership, Psychology, and Organizational Behavior*.

The reviewer, Lyman W. Porter, has recently transferred from the Berkeley campus (psychology) to the Irvine campus of the University of California where he is Professor and Associate Dean of the Graduate School of Administration. He recently co-authored with Haire and Ghiselli, *Managerial Thinking: An International Study*. He classifies himself as an industrial and organizational psychologist.

THIS BOOK represents an adaptation, and a close one at that, of the authors' previously published monograph for the American Foundation for Management Research, *The Psychology of Learning for Managers*. The material in that publication has been somewhat modified to make the present book applicable to training of other types of employees in addition to managers. The result is a short, concise, tightly written paper-back textbook in the series "Behavioral Science in Industry" edited by Victor Vroom.

The basis of the Bass and Vaughan approach to problems of training in industry is to tie the training process to the learning process. Hence, the first half of the book is addressed to such topics as "basic principles of human learning," "complex learning," and "conditions of learning." This heavy emphasis on grounding training procedures in fundamental concepts and principles of learning theory is commendable, in this reviewer's opinion, as industrial psychologists occasionally lose sight of this necessary first step. The authors have done a skillful job of outlining and highlighting a number of essential issues and findings in this area, and it is apparent that they know their way around the relevant research and literature from the field of learning.

THE latter half of the book is devoted to more applied issues such as designing training programs and evalu-

ating their effectiveness. Here, the reviewer felt somewhat less satisfaction with treatment of some of the problems and possibilities in these areas. For example, in the fairly complete (given the restrictions of the over-all length of the book) review of different types of training techniques, the authors were often inconsistent with respect to whether or not they gave their own evaluations of each method. In the case of role playing and programmed instruction they provided a discussion of the limitations and disadvantages, as well as covering the uses and advantages. On the other hand, with two other equally or more controversial methods, case study and laboratory (sensitivity) training, there was a virtual absence of any evaluative commentary. This reviewer would have liked to have seen some balanced evaluation of each of the methods discussed, since this could enhance the usefulness of the book for the beginning student who may be relatively unfamiliar with these techniques.

The other place where an expanded coverage could have aided students' grasp of issues was the section dealing with evaluation of training results. This is such an important facet of training from both an organizational and psychological point of view, it hardly seems that a mere 10 pages can do justice to the topic. What was said was fine—there just needed to be more of it.

Experienced readers will probably want to compare this book with the basic full-length book in this area written several years ago by two other industrial psychologists, McGehee and Thayer. I would rate the two books as equally competent volumes, with the chief differences being in length and the fact that Bass and Vaughan tend to give relatively more weight to basic learning issues and relatively less weight to problems of application than do McGehee and Thayer.

This book does not break any new or exciting ground in the area of training, but it covers some of the established essentials for those who want a scholarly, condensed treatment.

Perchance to Dream

David Foulkes

The Psychology of Sleep. New York: Charles Scribner's Sons, 1966. Pp. xii + 265. \$6.95.

Reviewed by RALPH J. BERGER

The author, David Foulkes, received his PhD from the University of Chicago and is Assistant Professor of Psychology and Philosophy at the University of Wyoming, Laramie. He was the recipient in 1965 of a three-year NSF research grant for studies of dream content. He is Secretary of the Executive Committee of the Association for the Psychophysiological Study of Sleep.

The reviewer, Ralph J. Berger, is Assistant Research Anatomist in the Space Biology Laboratory, Department of Anatomy and Brain Research Institute, University of California, Los Angeles. His PhD is from the University of Edinburgh and he has had seven years of research experience on the psychophysiology of sleep and dreaming, working with various mammalian species, including cats, monkeys, and humans.

A FLURRY of books on sleep has recently appeared. These have stemmed from the upsurge of research in this area following the finding by Aserinsky, Dement and Kleitman, in the early 1950's, that two physiologically distinct states of mammalian sleep exist, rather than a single sleep state merely exhibiting a continuum in depth. This book is mainly concerned with the nature of mental activity that occurs during sleep and the effects of environmental stimulation presented either prior to sleep or during sleep itself on such mental activity. The relationships between personality variables and the quality of mental experience during sleep and its possible psychodynamic importance are also described.

The form and content of the book are essentially derived from a series of previously published research articles by Foulkes and his associates. These studies were extremely important in demon-

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strating that dreaming cannot be considered to occur exclusively during the rapid eye movement (REM) phase of sleep, in which REMs occur in the presence of a low voltage, fast wave electroencephalogram (EEG), as had been previously thought by Dement and Kleitman. Instead, mental activity appears to be present in all stages of sleep. Although those experiences which would traditionally be classified as dreams tend to be reported more frequently following awakenings from REM sleep, they do also occur, but less often, following awakenings from the other sleep phase in which the EEG is of a high voltage, slow wave type and the eyes are quiescent. Unfortunately, Foulkes does not emphasize as much as he could how arbitrary the definition of a dream is, a point that might be so important to the new student of sleep, who is only too likely to adopt the widely held view that dreaming occurs only during REM sleep; Foulkes's data shows this clearly is not the case. Even Foulkes himself adopts this identification at times, so that, combined with a somewhat uncritical acceptance of physiological data (which he does not display towards psychological data), he may come up with a statement such as: "It seems clear, then, that the active intervention of the hindbrain structures uncovered by Jouvet is associated with the periodic production of REM-sleep episodes. . . . It is my contention that findings such as Jouvet's make it unlikely that the psychological factors specified in psychoanalytic dream theories, for example, disturbing memories, are responsible for the occurrence of dreaming." In effect, by this statement, he is identifying REM sleep with dreaming.

THIS is the first book to describe in detail the qualitative and quantitative variations in mental experience during the sleep-wakefulness process. However, although this is an extremely interesting and important area of study, it does not represent a complete Psychology of Sleep as the title of the book might suggest. Thus large areas of psychological interest are not included or only touched upon, e.g., discrimination, learn-

ing and performance during sleep, memory and sleep, sleep deprivation and its effects on cognition and performance, and sleep as a motivational state. These aspects are better covered by Oswald's *Sleeping and Waking* or Murray's *Sleep, Dreams and Arousal*.

It should be noted that the reports of sleeping mental experience, which constitute the data with which the book is primarily concerned, were obtained in a laboratory setting, and may not be typical of the mental activity that normally occurs at home. Although Foulkes considers this possibility, he does not discuss it at length. Recent studies by Hall and Van de Castle (1966) and Domhoff and Kamiya (1964) do reveal considerable differences between home and laboratory dream reports, home dreams tending to be more dramatic than those obtained in the laboratory.

The style of writing is clear and readable, if a little pedestrian. Two rather important figures illustrating the EEG and eye movement patterns during the various stages of sleep and the cyclic alternation of the stages throughout the night could have been made clearer. The references are listed in the text by number and grouped by chapters at the end of the book. This, together with the use of *ibid* for an already cited reference, makes for a very irritating system, since one has to flip back and forth repeatedly from one part of the book to another, while keeping in mind the number of the chapter one is reading, to locate a reference. No apparent attempt has been made for the book to be a reference work. As a reference source on sleep, Kleitman's *Sleep and Wakefulness* remains unsurpassed.

The book is intended for the interested layman and the specialist and is most certainly worthwhile reading for both. Although pains are taken to explain a number of physiological terms and procedures, familiarity with psychoanalytic terms and theory is assumed, which may be reasonable with respect to the psychologist, but not necessarily so for the layman.

An Italian Flavell

Guido Petter. With a Foreword by Jean Piaget

Die geistige Entwicklung des Kindes im Werk von Jean Piaget. Bern, Switzerland: Verlag Hans Huber, 1966. Pp. 367. Fr./DM 38.—

Reviewed by THOMAS B. SEILER

The author, Guido Petter, is about forty years old. He took his training in psychology at the University of Milan where he worked with Cesare Masatti and experimented on visual perception. His theorizing was then influenced by the Gestalt theory. Continuing his work with children, he developed an interest in cognitive processes and in Piaget. The book that is reviewed here is the result of this work. Petter is now full Professor of Psychology at the University of Padova. Besides developmental psychology, he is interested in its educational and didactic application.

Thomas B. Seiler, the reviewer, is a Swiss psychologist and philosopher who studied in Fribourg (Switzerland), Paris, Rome, and at the Free University of Berlin, where he worked with his compatriot Professor Hans Aebli and took a PhD in psychology. He followed Aebli to the newly founded University of Constance, where he is a research associate at the Psychology Department of the Center of Research in Education and Development. He has worked on Piagetian problems for many years and is currently translating Piaget's *La Naissance de l'Intelligence chez l'Enfant* into German.

PIAGET used to tell his students, who complained about the difficulty of his books, that he, too, understood them only at the second reading. Petter's introduction to, and summary of, Piaget's work may be understood at the first reading . . . if one knows Italian well enough to read the Italian original. If one knows German one will be happy to use the German translation, the book to be reviewed here.

Petter starts out with a short analysis of Piaget's style of thought and experimentation and of some fundamental traits of his theories. The three main parts of the book then summarize the 40 monographs that represent Piaget's *oeuvres*. Two principles serve to organize the summary. The first is taken from Piaget's own theory: Petter groups the material according to Piaget's main developmental stages. The first part thus deals with sensory-motor intelligence and the beginnings of representational intelligence, the second with concrete operations. Petter here reports Piaget's studies on the formation of the space, time, number, and speed concepts, and on the beginnings of the logical operations of classification and seriation. The third part describes the genesis of verbal thought, of hypothetical and deductive reasoning, and of moral concepts. However, the author does not adhere strictly to this stage-oriented organization of the material. This is due to the fact that his summary follows the expository order of Piaget's main books. Minor publications that seem closely related to major ones are treated in the same chapter. As a consequence, Petter is led to deal with Piaget's early studies on language development and on verbal egocentrism, which really pertain to the second stage, along with the studies of the third stage. The corresponding part of the book therefore appears very loosely organized and does not convey a very satisfactory picture of the stage of formal operations. Nor does this procedure show too much originality and structuring effort. On the other hand the single chapters are very clearly written. Petter presents a judicious choice of experiments; he describes these very exactly, reports the results in detail and often rearranges the order of experiments. These concise and transparent summaries of Piaget's drawn out and discouraging repetitive volumes represent the main attraction of Petter's book. For many students, educators, and teachers it may well develop into one of the main guides to that infinitely stimulating source of experimental ideas, hypotheses, and theoretical perspectives which spring from Piaget's observations and speculations.

The reader who gets so much help in his effort to understand Piaget has a tendency to develop some demand for critical analysis of Piaget's theories and of the way they are derived from the factual material. At this point Petter tends to disappoint the reader. Although some points are very nicely structured and simply and clearly formulated, Petter does not go on to give a thorough critique of Piaget's interpretations. The very excellence of Petter's report may even blind the reader for the many short-comings of Piaget's theorizing and of his way of deriving theories from experimental data. In this respect Petter's book does not fill the gap which is left in the German publications on Piaget. But the English speaking reader will not be troubled by this situation. He will be lucky enough to be able to look up what Flavell has to say about the point in case.

Intelligent Machines

Scientific American

A Comprehensive Review of the Extraordinary New Technology of Information. San Francisco: Freeman, 1966. Pp. 218. \$5.00.

Reviewed by WAYNE H. HOLTZMAN

Everybody knows the magazine, Scientific American, and the individual contributors are identified by the reviewer, Wayne H. Holtzman. He is Professor of Psychology and Dean of the School of Education at the University of Texas. His PhD is from Stanford and he has taught there and at Northwestern. For a number of years he was Associate Director of the Hogg Foundation at the University of Texas and he continues as consultant to that organization. He is co-author of Inkblot Perception and Personality: Holtzman Inkblot Technique and of the recent

The Peace Corps in Brazil: An Evaluation of the Sao Francisco Valley Project.

OCCASIONALLY a popular magazine manages to organize a collection of articles that are both timely and significant in their impact upon a given topic. In this review of the latest work in computers as "information machines" rather than giant calculators, the editors of *Scientific American* have pulled together an impressive array of outstanding specialists in computer science to explain in nontechnical terms many of the new developments that are revolutionizing our world. First published as twelve articles in the September 1966 issue of *Scientific American*, the chapters in this book range from computer logic, systems programming, and time-sharing to the uses of computers in science, education, information storage, and artificial intelligence. Though not as profuse and colorful as in the original issue, the frequent illustrations and brief working examples help greatly to get across specific principles and applications.

The thirteen authors represent a new breed of scientists, second-generation computer specialists who are among the best in programming and information technology. For the most part, what they have to say is of particular significance to psychologists although the book is addressed to a much larger audience.

In the opening chapter, John McCarthy, professor of computer science at Stanford, reviews the explosive growth of computer technology and the profound effect of information processing upon our society. In fifteen years the number of computers has grown from a dozen to 35,200. Investment in computers will rise from \$8 billion at present to over \$30 billion by 1975. Already measured in nanoseconds (one billionth of a second), speed of memory access may soon be measured in trillionths of a second with many billions of characters stored in one system. Unlike the foreboding cries of "1984" by some, McCarthy points out ways in which computers can be used to foster diversity and individuality rather than uniformity and conformity. With computer consoles as "essential household

equipment" and the ability to write programs commonplace, information utilities and centralized files will require a new kind of "bill of rights" for the individual.

Logical elements of computers are presented in simplified form by David C. Evans, director of computer science at Utah. The examples of computer logic and memory devices are sufficiently detailed to provide a good introduction to how computers work.

Of special interest to psychologists is the discussion of various man-machine interfaces by Ivan E. Sutherland, associate professor of electrical engineering at Harvard. The input-output system of a computer must interact naturally with a human being if it is to fulfill its primary purpose of extending man's intelligence and sensory capacity. Such graphic devices as the Rand Tablet, computer-generated motion-picture films, and cathode-ray-tube displays with light pens are touched upon lightly, as well as the more traditional card, tape, and typewriter devices.

System analysis and programming is presented by Christopher Strachey, a computer scientist at the University of Oxford, using as an example the chess-playing program developed by Arthur Samuel of IBM. Logic diagrams are given, together with parallel statements written in ALGOL, FORTRAN IV, and CPL (Combined Programming Language) to introduce the idea of programming. Strachey makes a special plea for hierarchical programming methods and redesigned hardware to overcome the current software crisis.

R. M. Fano and F. J. Corbato, the chief architects of Project MAC at M.I.T., give an excellent description of time-sharing, the technique whereby a computer serves a large number of people at once. Using the M.I.T. system as a model, the authors specify the nature of man-machine interaction by an illustrative dialogue between a user and the computer. The interdependency of users, the invention of social controls, the spread of remote users, the psychological aspects of man-to-man interaction through the computer are particularly intriguing aspects of Project

MAC that deserve the close attention of social scientists.

In a stimulating discussion of computers in industrial organizations, Martin Greenberger, a mathematician in the Sloan School of Management at M.I.T., presents convincing evidence that as computer systems take up more tasks in human organizations they come to resemble the organizations themselves. The ability of a computer system to grow and adapt to the environment is unmatched by anything short of living organisms.

EVEN more central to the interests of many psychologists is the use of computers in education and psychology as teaching machines, general problem solvers, and simulators of human behavior. Patrick Suppes, professor of philosophy and statistics at Stanford and one of the prime movers in computer-assisted instruction, describes several prototype systems dealing with drill and practice, tutorial interaction, and dialogue systems between students and the computer. Marvin L. Minsky, professor of electrical engineering at M.I.T., gives four examples of artificial intelligence by computers in which the computer sets goals, makes plans, considers hypotheses, recognizes analogies, understands limited English, or shows abstract reasoning in analyzing and displaying three-dimensional objects.

Additional chapters by Steven A. Coons on computers in industrial technology, by Anthony Oettinger on computers in science, by Ben-Ami Lipetz on information storage and retrieval, and by John R. Pierce on the transmission of computer data complete the collection.

While this book may present little that is new for the computer specialist, the large number of behavioral scientists having only a passing acquaintance with computers will find most of these articles highly readable and relevant to their own long-range interests.



Parents in Loco Parentis

David Fanshel

Foster Parenthood: A Role of Analysis. Minneapolis: University of Minnesota Press, 1966. xiii + 176. \$5.50.

Reviewed by MARIE SKODAK

The author, David Fanshel, is Professor in the Columbia University School of Social Work and Director of the Child Welfare Research Program there. He formerly was Director of Research, Child Welfare League of America. Research reported in this study was carried out at the Family and Children's Service in Pittsburgh over a period of three years.

The reviewer, Marie Skodak, is Consultant, Psychological Services in the Dearborn, Michigan Public Schools. Her PhD is from the State University of Iowa, and she is famous for her longitudinal studies of foster children with Harold Skeels. She is involved with foster care, both temporary and adoptive, through consultant relationships with child-placing agencies. She is exceedingly conscious of the problems of selecting foster parents who can meet the needs of children.

To what audience shall a book be addressed, which is a careful, detailed report of a careful, detailed, computerized and factor-analyzed study of what must have been thousands of response-items from 101 families? The families, in this case the foster parents, are unique in that they care for children not their own, for varying periods of time. As participants in this research, they deserve credit for patience far above the ordinary.

The foster mothers replied in writing and orally, to a 32-page interviewing schedule and filled out the Parent Attitude Research Instrument. The foster fathers, as befits their more modest role, filled out only 18 pages of interview material and the Parent Attitude Research Instrument. The case workers

who knew the families rated them on a Foster Parent Appraisal form. All this information was supplemented with basic data about the foster parents, such as their age, occupation, and social background. This tremendous array of individual responses was coded, and grouped into various indices and scales in an attempt to organize the responses and the information into some sensible and meaningful patterns.

The purpose of the study was to determine, if possible, what were the significant characteristics of people who care for children other than their own. Were their attitudes about children and child-rearing activities unique? Might it be possible to identify successful foster families before a child is placed with them?

This is the kind of 'practical' study which has only recently attracted the attention of behavioral scientists. The scarcity of research in this area is evident in the author's review of the literature. Thus the number of research-oriented psychologists, sociologists and their ilk, who could appreciate the effort and skill which went into this study, is likely to be very small.

Those most likely to purchase the book by title in the hope of learning therefrom, will be social workers, administrators, and board members of child caring agencies. A few psychologists involved in adoptions and foster care will also be attracted. Students in schools of social work are sure to find it on their reading lists.

UNFORTUNATELY, few readers in this larger group will be equipped with the statistical sophistication, or alternatively the patience, to give it the attention the study deserves and requires. For these readers the best advice will be to read the introductory and final chapters. Then perhaps they will be enticed into reading the intervening 130 pages for the informative conclusions and well stated inferences. The tables of correlations, statistical terminology and many qualifications, from which some very cogent suggestions are derived, will stump all but the most compulsive graduate students. It is true, even though regrettable, that most

practising social workers and sub-doctoral psychologists will start to get lost with "the examination of the matrix" and will reach for something else when they get to the "significant correlation between scores of foster mothers on the Benefactors of child scale and scores for deprivation in their husband's backgrounds." Neither the concepts nor the reading are easy. The author could have been glib and superficial. He chose to be sedate, factual, objective. If the reader wants to share the message, he must work for it. It will do him good, and it will be worth his effort.

Regrettably, the conscientious reader is not helped by the discovery that if he wants to see what was really in the 18-32 page interview schedule, or if he has only heard of but not seen the PARI, or would like to try the FPAF (Foster Parent Appraisal Form) he will have to send to three different places for sample copies. The author would not have been accused of padding this 172 page presentation if these had been included in an appendix.

It would be easy to disagree with some of the specific inferences and interpretations. Responses now labeled "pathogenic child-rearing attitudes" may not be so viewed in the future, or in different settings, or may even be desirable with certain children under certain circumstances. There is need for caution in extending to *all* foster parents, conclusions based on a sample which is unique in some respects, a caution dealt with in the foreword and the text.

Some of the social work folklore was confirmed. Foster mothers who board infants are different, but not consistently, from those who work with older children. Foster mothers are more active, at least in their relations with the agency case worker, than foster fathers. Foster families tend to be somewhat less well educated, a bit more old fashioned in their child raising attitudes than the liberal middle class values formulated by social workers and psychologists.

A major disappointment, at least to the author, was the finding that ratings

of the foster parents by case workers, proved to be less than reliable. Case workers, like the rest of humanity, base their ratings on their own experience vis-à-vis a given foster family. The foster family interacts uniquely with each child. Thus each case worker sees one facet of the foster family prism, and this facet reflects the child as much as it does the foster family.

There are also some sound practical suggestions to the executive who seeks to improve the services of his agency. These include taking a new look at the role of the foster father, in-service development of foster parents through the sharing of knowledge about child development, assessment of the psychological aspects of infant care homes, restudy of the sources and techniques for the recruitment of foster parents and continuity of relationships between worker and foster parents.

It is to be hoped that someday it will be possible to include the child in a study of the role of foster parents. Was it really those foster parents who knew the 'right answers,' who most nearly conformed to the social workers' ideals of child rearing attitudes, who effected socially desired changes in children?

Communications Can Be Fun?

William Stephenson

The Play Theory of Mass Communication. Chicago: University of Chicago Press, 1967. Pp. x + 225. \$5.00.

Reviewed by RAYMOND A. BAUER

The author, William Stephenson, is Distinguished Research Professor at the University of Missouri School of Journalism. He received his PhD from Durham University in 1926 and another one from the University of London in 1929

and has taught at Oxford, the Universities of Chicago and Washington. He has been at Missouri since 1958. He is the developer of the well-known "Q technique."

The reviewer, Raymond A. Bauer, is Professor of Business Administration, Harvard Graduate School of Business Administration. He is a longtime communication researcher—almost thirty years. He has written extensively, on Soviet Russia and other subjects. His latest book *Social Indicators* is reviewed in this issue of CP.

THE PROVOCATIVE and valuable thesis of this volume is that the intent and function of most of the fare in the mass media is to provide enjoyment, that enjoyment is a legitimate and necessary enterprise, and that both society and the individual would fare less well without it, and might fare better with more of it. Stephenson is well warranted in chiding communications theorists in general for treating mass communication as though it had all of a wide variety of functions except the obvious one that occupies so much of its time and space. Despite my own efforts to consider a wide variety of such functions, I realized to my chagrin that I would have to count myself among the guilty.

Stephenson's most cogent statement of the "play theory of mass communication" is: "... mass communication, where it concerns entertainment, is characteristically a matter of communication-pleasure. It brings no material gain and serves no 'work' functions, but it does induce certain elements of self-enchantment."

In the "Acknowledgements" Stephenson pays homage to Lewis Richardson, "for he loved fun." Unhappily the book, for all its rich content, is not fun. It is a series of discrete chapters with inadequate connecting tissue, most of which seem to be a collection of the author's reading notes on other peoples' theories, some passages on "play theory," and reports of empirical research using his celebrated "Q technique"—most of the findings of which bolster his general position, but often in a manner not much spelled out.

The following sampling of chapter headings gives an idea of the range of topics he covers: Reduction of International Tension, The Happy Alienated Worker, Ludenic Theory of Newsreading, and The Army-McCarthy Hearings. On these and five other such topics he offers sage criticism of existing views, data, and then a development of one or both theses, play theory or the need for audience research in order to make communications more relevant.

His emphasis on audience research is well taken, though it has no necessary relationship to play theory. He demonstrates in a variety of instances that there is not one, but a variety of attitudes toward the phenomenon in question. This is best illustrated in his approach to the "alienated worker," where he shows on the basis of research with several types of workers—supervisors, secretaries and clerks—that what each finds and wants in the job situation is quite different. He makes the quite telling criticism that while each wants different things from the job, none of these groups of workers expressed any desire whatsoever for better "human relations" treatment from their supervisor. He concludes that work in general is intrinsically less rewarding as our society develops, and that the most useful contribution that the mass media can offer is to provide workers with something to talk about while they pass the time of day on the job! It is characteristic of the book that having made much of the existence of multiple audiences, his main substantive point bears on an issue on which all of his audiences agree.

He provides some other shockers. For example, he suggests that one of the difficulties of underdeveloped countries is that people are asked to work for distant goals with deferred gratification far enough away to be discouraging if they are expected to keep their nose to the grindstone constantly. He concludes that the communist formula of loading the media with serious fare is precisely wrong. The media, he says, ought to provide diversion to make man's lot tolerable. From my own early work on the reactions of former Soviet citizens

to Soviet media, I can testify that Stephenson is certainly relevant if not right.

The media are often criticized because they over-personalize, over-dramatize, and under-represent the serious business of the world. He cites Helen Hughes as asserting that this "human interest" approach to the news creates involvement, and has provided the opening wedge for discussion of moral values, scientific issues, and such controversial topics as homosexual

His final chapter features some challenging statements as these:

"... reality is so complex that its symbolical representation is essential to give it meanings that ordinary people can appreciate."

And,

"In my view mass communication is better understood ... as being manipulated subjectively by its audiences, who thoroughly enjoy what they are being offered for the first time in man's history."

Clearly, he flouts much of the conventional wisdom about the role of the mass media. And this must be considered a good thing, since no place else in social science literature is there so much unquestioned, unrecognized, and unanalyzed ideology coloring the topic from one end to the other. It is difficult to escape the fact that people derive intrinsic pleasure out of much that they find in the media. It is also obvious that various forms of play are a legitimate aspect of almost all cultures. It is additionally obvious that almost all treatments of the mass media have regarded them primarily as media for education and transmission of information. Insofar as the content that is "entertaining" is concerned, it is justified only if it "uplifts," but not if it is solely "entertaining." The latter is "escape," and that is a "bad thing." There is a cultural value here that needs examining.

This is all the more reason to regret the fact that this book is such poor reading. It is sad that a book on communication puts such a burden on the

reader. The topic is worth the attention of any literate citizen. The argument, when you can locate it, is thought-provoking, and to my judgement rather convincing—but holds to a degree that I cannot yet venture to specify. Unhappily, I fear that the book will be read only by especially devoted communication researchers, and possibly by some hostile social critics who will explain it away.

Erikson, Piaget and Child Development

Mollie S. Smart and Russell C. Smart

Children: Development and Relationships. New York: Macmillan, 1967. Pp. ix + 582.

Reviewed by JEAN C. COHEN

Both authors, Mollie S. Smart and Russell C. Smart, are in the Department of Child Development and Family Relations at the University of Rhode Island. Mollie is Associate Professor and Russell is Professor and Chairman of the Department. Both have been faculty members at the Merrill-Palmer Institute and at Cornell. They spent last year in New Delhi, India, where Russell was Fulbright Professor at Lady Irwin College and Mollie was Fulbright Research Professor at the Child Guidance Clinic at the College of Nursing. They continue in India on leave of absence as Indian coordinators of the Wisconsin Year in India Program.

The reviewer, Jean C. Cohen, is Research Associate in Psychology at Smith College. Her graduate work was done at the Iowa Child Welfare Research Station of the University of Iowa. She has

taught courses in child and adolescent psychology at Smith and at the University of Massachusetts.

As the literature in the field of child growth and behavior is now very large and very diverse, the selection and organization of material for an elementary text is not an easy task.

In the Preface of this text, the authors comment on their selection of material: "The field of child development traditionally includes physical as well as psychological development. It also includes consideration of the family and culture in which the child grows up." All of these areas are dealt with in the book and, as the authors imply, it is similar to other texts in this respect. Their real innovation is use of the developmental theories of Erik Erikson and Jean Piaget to provide continuity and context for discussions of personality and cognition at the various age levels. In the authors' words, "... our main purpose in using the ideas of Erikson and Piaget [is] to integrate the book. The multiplicity of research on children, especially on relationships, makes confusing reading unless some threads of consistent theory tie it together."

The book is organized to permit full utilization of this approach. There are four main sections: Infancy, The Preschool Child, The Schoolage Child, The Adolescent. Erikson's stages of ego development are described in order: the sense of trust is discussed in the section on infancy, the senses of autonomy and initiative in the section on the preschool child, and so on. Similarly, each of Piaget's stages of mental growth are introduced and discussed at the appropriate age level. Both theories are treated descriptively rather than analytically, and for neither are the more difficult theoretical concepts included.

TO CONSIDER Erikson and Piaget sequentially throughout the book in this fashion does make for a consistency of language and does provide connecting links, but it also leads to serious problems.

First, to use the theories as the structural bases for the entire text

makes it likely that the student may forget or overlook the fact that each theory is, indeed, a theory and not simply an ordering of observational data. This danger is increased because there is very little attempt, particularly in the introductory comments to each section, to separate the theoretical concepts from the behavior on which they are based.

Second, the use of these two theories as a framework does not provide for adequate treatment of certain topics. Explanations of social learning, fear in children, and language learning, for example, are not easily accounted for by the conceptions of either Erikson or Piaget: these theories were not intended to be all-inclusive. Yet using them as framework has forced the authors to omit consideration of any other theory, the most notable omission being learning theory. There is no treatment (except for a brief discussion in the introductory chapter) of concepts or principles of learning; no consideration of children's learning as such; and very little discussion of studies which have been conducted within a learning context.

Erikson's theory, with its orientation toward healthy as contrasted to potentially destructive psychological development of personality, is particularly difficult as the sole rubric for studies of parent-child relations. The studies are not easily related to the theory because they use more specific variables and are not so much concerned with healthy and unhealthy behavior as with simply individual differences. Also the studies are often interpreted by the authors from an applied point of view—how parents should treat children to bring about their healthy growth. It should be noted that, except for infrequent scattered references, there is no discussion of methodology.

The treatment of normative development in all areas of child growth is thorough and very well done. Also, literature from an uncommonly large number of fields is presented, including studies from psychology, sociology, anthropology, education, medicine, and psychiatry.

Freudian Light on Literature

Leonard and Eleanor Manheim (Edited, and with introductions, by)

Hidden Patterns: Studies in Psychoanalytic Literary Criticism. New York: Macmillan, 1966. Pp. 310. \$6.95.

Reviewed by LOUIS FRAIBERG

The first editor, Leonard Manheim, has taught at CCNY, is now at the University of Massachusetts, and in September, 1967, became Professor of English at Hartford University. He took his PhD at Columbia where his dissertation was a psychoanalytic study of Charles Dickens. He is a co-founder of *Literature and Psychology*, and has been Editor since its inception. Eleanor Manheim, the second editor and co-founder of *Literature and Psychology*, took her PhD in French literature at Columbia. She taught at the University of Massachusetts and went to the University of Hartford in September. Like her husband, she has contributed articles on psychoanalytic literary criticism to various journals.

The reviewer, Louis Fraiberg, is Professor of English at the University of Toledo. He has taught at Wayne State University, University of Michigan, and Louisiana State University, New Orleans. He was Chairman of the Department at Toledo from 1963-66. He is author of *Psychoanalysis and American Literary Criticism* and of articles on both literature and psychology in various publications. He is currently studying problems of creativity in the arts as seen by psychoanalysts, literary critics, and artists.

A REVIEW of this book properly begins with an account of the occasion which calls it forth, since it is gently polemic as well as informative in intent. In form it is primarily a collection of papers on literary subjects

written by scholars and critics who find depth psychology useful in their understanding of literature. It is spiced with selections from Freud and Jung (one apiece) the net effect of which is to suggest that the work of the psychoanalyst has more to tell us about the literary mind and its products than that of his one-time disciple. Because the contrary opinion is held by some critics and creative writers, the thrust of this book is toward defending and consolidating a critical position against a contender.

Literary criticism has always relied upon the sensibility of the critic along with such extra-literary disciplines as appealed to him. In the past 150 years or so these have increasingly included the sciences; in our own time especially psychoanalysis. It has survived the dilettantish attentions of the Greenwich Villagers of the 1920's and the ideological ruthlessness of the Stalinists of the 1930's and 1940's. Now that artistic and political conditions are more favorable it still has to contend with the fact that most educated Americans have a smattering of id-psychology as part of their mental furniture and that a large number of its debased products are being given wide circulation by the mass media. Knowledge of psychoanalytic ego-psychology, however, has not yet penetrated the scholarly or public consciousness to any meaningful degree—and there is the undoubted appeal to many literary minds of Jung's pseudo-scientific brand of mysticism. It is this situation which led in 1951 to

the founding of *Literature and Psychology*, the quarterly from which most of the essays in the present collection are reprinted.

The book, then, has a polemic intention, but it tries to avoid mere argument and to rely instead upon the best possible answer to skeptics, namely good work. This is evidenced by the generally high quality of the papers as literary criticism, by their authors' comprehension of psychoanalytic ideas, by their cautious applications of these to the works and problems which they discuss, and by the modest and realistic claims they make for their results. There is more enlightenment than contention here, to the mutual benefit of the associated disciplines.

THE PSYCHOLOGIST is professionally committed to the investigation of mental life by means of scientific method, that is, by an artificial narrowing down of vision, a factoring of the mysterious, or at least confusing, whole into elements which can be seen more or less clearly, which can be isolated, individually described, and thus defined. Paradoxically, he expects that these discrete particles can then be fitted together again to make a meaningful whole, and indeed they often do—but at a cost. The various tiles may be combined to form a mosaic, a pattern suggested to the physical eye which the mind's eye completes by providing connections between components that have been merely laid side by side without being truly linked. By its objectified descriptions psychological science thus solves the riddle of the Sphinx in Oedipus's terms: the answer is Man. But it can only strive endlessly to cope with the Oedipal riddle: What is Man? For this is the true problem of psychology just as it is the true problem of philosophy, religion, and literature.

Literary critics, in turn, address themselves to the mysteries of artistic vision by studying both the medium and the means, the form of the finished product—play, poem, or story—as well as the kind of information about the world and the mind of the artist which it conveys. That mind is essentially a synthesizing rather than an analytic one.

It analyzes, to be sure, but it does so in the service of a revelation or, to use a psychological approximation, a Gestalt. In literary composition the total conception usually comes first; it is this that compels the writer to write. It is the goal, however nebulously conceived at the outset, that is before him as he undertakes the task of giving it objective reality, which he attempts to do—also paradoxically—by meticulous rendering of concrete details. His successful marshaling of apparently unrelated items achieves a totality which is more than a picture. It is an experience, a contribution to human understanding not by elucidation alone but, more importantly, by direct apprehension. In a sense, this process may be said to complement the work of the psychologist, and the converse is also true.

THE RELEVANCE of this book to the readers of *Contemporary Psychology*—who are after all not professionally concerned with literary criticism—lies therefore in the area of relationships. *Hidden Patterns* is devoted to problems of the relationship of psychology—especially Freudian—to literature. There is more to the critic's use of psychoanalytic principles than a mere matching of literary patterns with a scientific schema, however sophisticated. Critics, like authors, are concerned with meaningful wholes even more than with the means of constructing them, though the techniques necessarily engage a great deal of their attention. They ask questions like these: What aspects of scientific psychology go into a particular literary form? Just exactly how? What relationship do they bear to other elements in the work? What do they contribute to the whole artifact and its effect? How are the emotional components integrated with intellectual ones?

Questions of this kind would seem to be mutually interesting to critics and psychologists. *Hidden Patterns* demonstrates by example how much has already been accomplished in this field by students of literature and offers notable encouragement to psychologists to join them.

Multi-Disciplinary or Inter-Disciplinary?

D. B. Bromley

The Psychology of Aging. Baltimore, Md.: Penguin Books, 1966. Pp. 366. \$1.45.

Reviewed by DAVID SCHONFIELD

The author, D. B. Bromley, is Honorary Scientific Adviser to the Medical Research Council Unit for Research on Occupational Aspects of Aging and Lecturer in Psychology at the University of Liverpool. He received his PhD from Liverpool after graduating from the University of Manchester. He has published numerous papers concerned with age changes in psychological processes.

The reviewer, David Schonfield, is Professor of Psychology at the University of Calgary, where he was previously Head of the Department of Psychology. At present, he is spending a sabbatical year as (Canadian) National Research Council Senior Fellow at the Institute for the Study of Retirement and Aging, University of Southern California.

THE TREND towards over-specialization is said to be counteracted by interdisciplinary approaches. A new field of inquiry, such as gerontology, might therefore be expected to exemplify the advantages of cross-fertilization of disciplines. However, the tendency even in the new fields to split into subdisciplines is probably irresistible, and possibly advantageous. The title of Bromley's book leads to the expectation that he has bowed to the inevitable, but its contents show that he is attempting to be on the side of the angels, with a third of his text covering biological and social aspects of aging. Indeed, the section headings are not dissimilar to those found in most general introductory texts, which also attempt to reach over into our sister subject areas. Unfortunately, this only makes a text multidisciplinary. To be interdisciplinary requires more than a brief nod of

acquaintance to elementary anatomy, physiology, anthropology, role theory, statistics, etc. Bromley's handshake with certain problems in perception, learning, personality, mental illness, and intelligence testing often leave the impression of meeting individual strangers at a cocktail party, rather than sitting down to a meal among friends. The author modestly disclaims expertise in all aspects of aging and has provided numerous useful references. In fact, the price of the book would not be excessive for the bibliography alone.

THE potential readers are intended to be the intelligent layman, specialists in fields such as medicine, social welfare or biology, as well as undergraduate and graduate psychology students. There are obvious dangers in attempting to cast a net so widely. Bromley realizes this and advises the experts to skim background material. However, the choice of what to define and what not to define, what to emphasize and what not to, constitutes a greater problem in a book of this nature than in the case of texts where 'prerequisites' can be assumed. For instance, there is mention of the superior temporal gyrus and avitaminosis without definition, and the Gompertz equation is provided although the variables are not elucidated. Yet we have to be told that sperm cells are produced after puberty in the testes, and about a page is devoted to a simple exposition of the IQ in terms of mental age. Presumably because of the desire to simplify, some of the statements come dangerously close to tautologies. Thus we read, "Psychological stresses can precipitate mental illness in persons who are predisposed" (p. 115), and that one of the reasons why depression is a common complaint in elderly patients is because more people are surviving into later life to suffer from depressive illness (p. 137). Even the intelligent layman might raise an intelligent eyebrow when he is told, "In some individuals emotional disturbances lead to neurotic or psychotic breakdown" (p. 57), and that better adjusted men show fewer neurotic symptoms than the less well-adjusted (p. 103).

One of the more pleasing facets of

the book is the mixture of pure and applied coverage. The nature of skills is linked to prevention of car accidents, creativity with a very detailed summary of Lehman's studies of achievement, Wechsler's deterioration index with the distinction between specialized and unspecialized intelligence. It is the reviewer's opinion that a more careful analysis of these psychological aspects of aging would have produced a more praiseworthy volume. It is better for an author to confine himself to areas where he can claim expertise. The beneficial results of conserving energy for fewer activities, which is the functional basis for disengagement in the adult years, applies to the writing of books as well.

DR. BROMLEY's view is that much of what we know about the psychological aspects of human aging "consists of masses of detailed, low-level empirical observation, lacking system and explanation" (p. 285). Instead of taking a fatalistic attitude, an author venturing into this field might consider his main duty to be an attempt at imposing order. Although we receive some tentative explanations from Bromley we do not get enough. And, sometimes, important concepts are changed in meaning so that they lose their explanatory power. An example is the concept of pacing which becomes equated with any speed performance as an explanation of the decline with age in scores on Block Design and Digit Symbol tests. A greater concentration of effort on psychology might have avoided the impression provided by the various figures that functions which deteriorate with age do so at a constant rate during the adult years. Although it is not difficult to criticize this book, in justice to the author it has to be said that he is dealing with relatively uncharted areas. Because of his efforts the pathways may become more distinct.

Advances in theoretical formulations need not be all or none affairs, and this volume makes a contribution in many suggestive parallels between the decline of intelligence with age and changes in strategies in the performance of per-

ceptual motor skills. Although he draws heavily on Welford's approach, Bromley introduces original interpretations in discussing the Cambridge experiments. One of the features of this approach, which owed so much to Bartlett, although he does not receive a reference in this book, was that the study of age changes could illuminate and even correct some of the popular viewpoints of general psychology. This, in the reviewer's opinion, remains true, and is one of the attractions of the sub-specialty. Bromley will have served both psychology and gerontology well if his new text arouses more enthusiasm for research in this field.

The Will to Find Work

Harold L. Sheppard and A. Harvey Belitsky

The Job Hunt: Job-Seeking Behavior of Unemployed Workers in a Local Economy. Baltimore, Md.: Johns Hopkins Press, 1966. Pp. xiii + 270. \$7.95.

Reviewed by DOUGLAS W. BRAY

Both authors, Harold L. Sheppard and A. Harvey Belitsky, are at the W. E. Upjohn Institute for Employment Research, Washington, D. C. Sheppard is a sociologist with the title of Staff Social Scientist and is co-author with Kornhauser of *When Labor Votes* and with Ferman of *Too Old to Work: Too Young to Retire*. Belitsky is Staff Economist and a former faculty member at Rutgers University and Lawrence College.

The reviewer, Douglas W. Bray, is Director of Personnel Research, American Telephone and Telegraph Co. His PhD is from Yale University and he formerly was Research Associate with the Conservation of Human Resources at Columbia. He is author of *Issues in*

the Study of Talent and, with Eli Ginzberg, *The Uneducated*.

THE causative role of individual motivation in economic life has lately commanded increased psychological interest. This book reports a survey study of job-seeking among a sample of unemployed workers in Erie, Pennsylvania, and makes a pioneering attempt to relate aspects of job-seeking behavior to psychological determinants. These determinants are achievement motivation, achievement values, and job-interview anxiety.

The main data of the study were collected through lengthy interviews with approximately 300 male blue-collar workers (women and white-collar workers were also sampled). Of considerable interest is the attempt to measure motivation and anxiety in the course of the survey. Achievement values and job-interview anxiety were tapped by degree-of-agreement questions in the 156-item schedule; four TAT type pictures (not illustrated or described) were presented to assess achievement motivation.

The fact that survey respondents will answer such motivational probes, although previously demonstrated, is noteworthy. The authors, unfortunately, do not comment on reactions to the interviews. No resistances or refusals to respond to the pictures or the anxiety questions are noted. Also ignored are possible 'invasion of privacy' objections to these methods. The authors recommend, in fact, that the anxiety and values questions be asked of unemployed workers using the State Employment Service.

The data reveal significant, although sometimes small, relationships between job-seeking behavior and motivation. Seventy-five percent of male blue-collar workers with high achievement motivation, for example, waited no more than two weeks to look for a new job as compared to 61 percent of those with low motivation.

THE conclusiveness of this study is limited by its ex post facto 'design.' The sample contained many types of unemployed and in order for meaning-

ful tests of hypotheses to be made, many different groupings of subjects were necessary. Some variables made large groups of subjects inappropriate for important comparisons. For example, 43 percent of the male blue-collar 'unemployed' were back on their old jobs by the time they were interviewed. This left only 176 others (only 48 still unemployed) spread widely over age, skill, and educational levels.

As a result of this heterogeneity, the authors continually shift back, forth, around, and among a variety of subject groupings. This not only casts doubt on the interpretation of significance tests but makes it very difficult for the reader to keep any kind of focus as he works through a plethora of tables and comments on tables. The final chapter starts appropriately with the phrase "Having emerged at last from the tree-like profusion of facts and statistics. . . ."

Neither is the style of presentation helped by the pontification of truisms such as "Achievement motivation may actually be expressed by an individual in spheres unrelated to employment and the job world."

In summary, this volume reports on a laudatory initial effort to study job-seeking behavior as related to individual motivation and affords a suggestive base for further research in this important area. Such research can be more rigorously planned as a result of this study and, hopefully, more crisply reported.

Disorder and Disease

Mary Alice White and June Charry
(Eds.)

School Disorder, Intelligence, and Social Class. New York: Teachers College Press, 1966. Pp. viii + 92. \$2.25.

Reviewed by ELI M. BOWER

The first editor, Mary Alice White, is Professor of Psychology and Education,

Teachers College, Columbia. She is vitally interested in research in psychological aspects of education and is active in training school psychologists. She is a Member, Joint Commission on Mental Health of Children. June Charry, the second editor, a Columbia PhD, is Chief Psychologist in the Hartsdale, New York Public School System and is also in private practice.

Eli M. Bower, the reviewer, is Consultant, Mental Health in Education, Research Utilization Branch, NIMH. Formerly he was Deputy Director, California State Department of Mental Hygiene and served as Research Coordinator of a project on emotionally disturbed children for the California Department of Education. He is author of Early Identification of Emotionally Disturbed Children in School.

THIS is a neatly put together, succinctly written documentary describing what a group of school psychologists did to contribute to their own professional effectiveness. What they did, the "they" being the Westchester Association of School Psychologists and a class in Experimental School Psychology at Teachers College, Columbia, was to design and carry out a study on the relationships between school disorders and later mental disorders with some local stops along the way. I would surmise that part of the impetus for the inquiry is the need to reexamine the ancestral lineage of school psychology, especially our grandparents, clinical and abnormal psychology and some of our first cousins, the mental hospital, the mental health clinic, psychiatric nosology and the notion of illness as a result of intrapsychic conflict. What White, Charry and their respective groups are asking is a highly meaningful question: Dare we consider school disorders as significant to children in and of themselves or must they somehow be linked to future disorders as grownups?

White, Charry and Company discovered and rediscovered some interesting things about schools and school disorders. About 5 percent of the children were referred for psychological services; three out of four referral actions were initiated by school staff; "learning diffi-

culties" were the prime reason for referral although it was rarely given as a single reason; the major type of service to referrals was the interview (teacher, mother or both). They seemed somewhat surprised to find that the referral sample was quite representative of the socio-economic characteristics of the total school population, but did find as expected that the IQ and achievement of the referred group was indeed lower than the normal school population. The peak of referrals were from grades K-3, which points to a shift in school emphasis and perhaps sensitivity in picking up early problems.

The implications of these and other findings are nicely tied together by White and Charry in five crescendo-like pages. School disorders, they point out, are more related to lower IQ (the wherewithal for school functioning) than to lower socioeconomic status as it is defined solely within a school context. The significant aspect of a child's life in school is his ability to learn. Might this not also be the significant aspect of life in the greater society? To what extent, ask White and Charry, is mental illness a failure in learning?

I suppose what this group of researchers and their leaders are suggesting is that the shortest and most economical distance between a school psychologist and the problem of mental disorders is a school disorder. Finding ways to help desperate children cope with the demands of this gigantic, inescapable and unyielding primary institution may be our best bet for reducing mental disorders in our society. All this and more in only 92 well written pages.

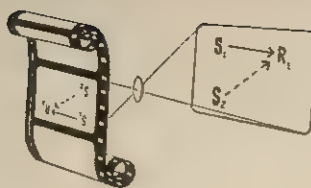


What distinguishes a duchess from a flower girl is not so much the way she behaves as the way others behave toward her.

—GEORGE BERNARD SHAW



INSTRUCTIONAL MEDIA



Psychology: Present, Past-present, and Perplex

Stanley Coopersmith (Ed.)

Frontiers of Psychological Research. San Francisco and London: W. H. Freeman, 1965. Pp. 322. \$4.95.

Robert S. Daniel (Ed.)

Contemporary Readings in General Psychology. 2nd Ed. Boston: Houghton Mifflin, 1965. Pp. 417. \$3.95.

Robert L. Wrenn (Ed.)

Basic Contributions to Psychology. Belmont, Calif.: Wadsworth, 1966. Pp. 308. \$4.35.

Reviewed by PETER GUTHRIE

The editors of the three books reviewed are: Stanley Coopersmith, Department Chairman and Associate Professor at the University of California, Davis; Robert S. Daniel, Professor of Psychology, University of Missouri; and Robert L. Wrenn, Assistant Professor and Counseling Psychologist, University of Arizona.

Peter Guthrie, the reviewer, is Associate Professor of Psychology, Carleton College. He has reviewed previously for CP (May, 1963; Jan., 1965). The book edited by Daniel was reviewed in CP by John K. Bare (Feb., 1966) and is included in this review to provide opportunities for comparison and contrast.

WHATEVER eye-catching value the title of this review may have, it is also intended to approximate the three books being reviewed. Coopersmith's *Frontiers* is aptly named; its

papers are very much in the present. Wrenn's *Basic Contributions* represent both past and present and Daniel's *Contemporary Readings*, while up to date, are more intended to arouse discussion of issues and to pose some of the perennial problems of psychology than to make the reader au courant regarding recent research.

Readings for the introductory course are necessarily part of a package that is likely to include a text, the lectures, and still other materials. These three readers attempt to fill three very different needs and the choice of one of them should influence the choice of other items in the package.

The papers in Coopersmith are all drawn from the *Scientific American* and span a period from 1948 to 1964. They deal with matters that are interesting psychologists now: ethology and animal communication, the origin of form perception, split brain preparations, experi-

mental research in social psychology, human learning and memory, schizophrenia, and teaching machines, to mention only a few of the topics. The papers were written by psychologists, many writers very close to psychology, other psychologists, other scientists, or have been interested in the field. Thanks to Coopersmith's careful selection, these papers avoid the criticism to which some *Scientific American* papers have been open; namely, that they include too many references to other works and require too large a technical vocabulary for a general audience. Coopersmith's choices appear to me a very fair sample of relevant articles over the 17-year span.

Wrenn took a different tack. He determined which articles or excerpts are most often referenced in introductory texts and then made his selection from these "most cited" papers. Starting with five well-known standard texts, he tallied 3,587 references. Of these, 29 were cited in all five and 93 in four of the five. His actual 48 readings were taken from these, with the exception of some which were too "jargon laden" or too technical. Substitutions for these exceptions were made by choosing a paper by the same author, or a paper having the same import as the original.

The result of this procedure is startling. Browsing through these readings is like spending an evening with the family album. Free associate to such terms as frustration, learning, sex, and there are the references one produces: Barker, Dembo and Lewin; Hull, Pavlov, and Skinner; and, yes, Kinsey, Pomeroy, and Martin. The past is represented by selections from Ebbinghaus, Poincaré, and Köhler (1925), to name a few. This is not a book of readings from the past, but a book that illustrates continuity between past and present.

Daniel provides my perplex. His readings were written by psychologists for *Vogue* magazine, by philosophers for *The Listener*, and by such improbable authors as the "staff" of *Changing Times*. I confess this put me off. I was further put off by Daniel's comment that the sort of scientific reports one finds in technical journals are "... detailed, impersonal, and sometimes even dull" (p. vi). However, recalling Festinger's warning that we value highly

whatever we have struggled to obtain, and mulling Carmichael's high editorial praise of Daniel, I went over the volume again. About a third of the papers are by nonpsychologists. Some are unabashed popularizations. For example, one paper about "The Involuntary Bet" (the unconscious inference?) describes the interesting phenomena of space perception without offering an iota of understanding to the student. Another about the fallibility of witnesses runs Freudian repression theory, mnemonic and early interference theory no together like a watercolor left night on a wet lawn. Still another, the "staff" of *Time Magazine*, attempts and fails to do for nervous breakdowns and psychotherapy what Thomas Hobbs did so well in his "Sources of Gain in Psychotherapy" (*American Psychologist*, 1962). But the popularizations are not all bad; more than offset by the many excellent selections. Conant discusses "The Scientist in Our Unique Society," J. Ayer examines the mind-body problem, and Adolf Grünbaum and E. Boring illuminate the question of freedom and determinism. Thus, one reason for calling this book perplex is that it treats problems and confusions in psychology.

But Daniel does more than that. One of Daniel's aims was to develop content. Dean Wooldridge has a fascinating article on memory and his paper precedes papers by J. Z. Young and G. A. Miller. These, and other inclusions, are not research reports and they are not dull.

IN addition to making the selections and abridgments, each of the editors of these three readers has added some editorial comment. The comments are handled differently in each case. Coopersmith, which is divided into five main sections, with two sections subdivided once, provides a general introduction and again a specific one for each section and subsection. These include references to *Scientific American* articles not included in the reader and also some cross references to related materials in the reader. A short author-subject index is included and, just before it, the au-

thor biographies and brief bibliographies familiar to *Scientific American* readers.

Wrenn has written short introductions to each of the ten parts into which his book is divided and has listed suggested readings at the close of each part. Original references for individual papers have often been eliminated through abridgment. Each paper is prefaced by a paragraph about the author and by two or three study questions. While Wrenn has not included an index, he has provided a final section of tables that correlate his selections with chapters in 18 current introductory textbooks. This section is not a detailed cross-reference system but would enable the student to locate quickly some topics in the reader that are relevant to his text's discussions.

Of the three, Daniel comments least upon the contents of his book. Each of the nine parts into which this book is divided is given a short introduction. Topical and biographical paragraphs precede each selection and short lists of suggested readings follow each part. Daniel omits an index and that may pose a problem for students because the often literary titles of the papers fail to communicate unambiguously their contents. Reference lists for individual articles are included in some cases, but are frequently lacking because the original articles included none.

Perhaps the first difference one will notice when he compares these three readers is that Coopersmith is filled with illustrations while Daniel and Wrenn have culled all but a few tables and graphs. The figures in Coopersmith are mainly informative, and some should be very helpful to the student who is trying to visualize experimental situations or to understand complex relations among variables.

In sum, here are three valuable books of readings. Each treats different matters and assembles the whole in different ways. Coopersmith reports what is new and exciting and the many illustrations add to the sense of excitement. Wrenn carefully provides continuity between past and present and systematically relates his materials to those about which the student is learning. Daniel poses questions, elaborates concepts, and reflects, in part, how others see us.

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What is the author to do when he is describing events of which he himself is the agent? Is he to say I, we, the writer, one, or does he drop into the circumlocutory passive? No grammatical rule can be adequate to this problem. The admonition to write so skillfully that the problem does not arise is lost on the untrained writer. Yet there is one rule that works very often; it is this "contra-narcissistic" principle. If the author will get his attention off himself and on his readers, if he will forget his own personal activities and begin to talk about facts as a function of method, he will find that half of these difficulties never arise. It is his own preoccupation with himself and the difficulties of his research that make him so personal. Sometimes it is his fear that his results will not stand generalization that makes him limit himself to the minutiae of the particular—the truth as it stood for him on Wednesday afternoon, the 18th. I do not mean that he should obscure the particular in his generalizing, but only that he should be thinking about the generalization because it is all that most of his readers wish to get from him.

In the other half of the cases the author must ask himself: What would my readers prefer? It is simplest to say I for the author, we for joint authors, and we for the single author and his reader having a communal idea. We for the single author offends many persons, because there is no visual image for it, short of majesty. The New Yorker uses this we to achieve humor: "we ourselves."

The passive irritates the reader who wants clear direct diction. So also does the too frequent use of I. It is entirely a problem as to when I is egoistic! It is plain that the reader expects more deference and fewer I's from the young author than from an older, well-known writer, but my own judgment is that even the young writer may safely use I if he really feels a deference for his reader. Any why should he not, since the existence of his public is a necessary reason for his research? The altruistic principle, here reduces to a matter of good manners. The first person singular will not offend if it is used modestly.

—E. G. BORING

BRFLY NTD

ARTHUR HENLEY, *Demon in My View*. New York. Trident Press, 1966. Pp. 181.

Adelio Giuseppe Ambruno Pasquale Antonio Montanari is a man to be reckoned with, seriously. He is not reckoned with well in this idolatrous book. Montanari, or "Monty" as he must be called, runs a private, residential treatment center for emotionally disturbed children near Miami, Florida. He started it in 1952, accepting a few disturbed children in his own home. He now has over 150 children in a scattering of converted residences in a not too pleased suburban neighborhood. He accepts all kinds of seriously disturbed children, including the schizophrenic, autistic, brain damaged, crippled, and mentally retarded. They are often rejects from other programs and private therapists from all over the United States, and he has gained a substantial reputation for effective work with them. He built his now famous school by shrewd boldness, tenacity, an unorthodox, intuitive methodology, and a passionate devotion to "my kids." The school is his life, a testimonial to the talents of a man rightly called extraordinary.

Arthur Henley opts for a magical explanation with Montanari cast in the role of magician, a *mise en scène* that inevitably sells the man short. Page after page give anecdotes illustrating the "magic" of Montanari, the essence of his ability to 'charm children'! If Henley's appraisal is correct, the school cannot survive Montanari. And this would be a great misfortune.

The problem with the book is that Montanari's ideas do not come through, and when they do crop out they are often as not made to appear shallow and obvious. Possibly this is Mon-

tanari's fault, an expression of his self-image as a maverick, of his rejection of the establishment. But ideas they are, and they deserve careful formulation in the interest of better treatment of disturbed children throughout the world. The important account of Montanari and his method is yet to be written. People concerned with helping disturbed children are in no position to neglect any promising leads and should encourage the research, the observation, the critical analysis that could extend Montanari's ideas beyond himself.

NICHOLAS HOBBS

EDWARD F. GRIFFITH. *Marriage and the Unconscious*. 2nd Ed. Springfield, Ill.: Thomas, 1967. Pp. xi + 273. \$8.50.

In this expanded version of a book first published in England in 1957, an English physician illustrates through well chosen case studies the part unconscious forces play in marital as well as personal disharmony. He stresses the difference between presenting symptoms and basic conflicts. Filled with much sound advice, almost in the manner of consultation room chats, the book avoids technical jargon and is honest concerning Griffith's own value preferences. If you are not averse to insights derived from Jesus and Jung, as well as more usual Freudian citations, you will find practical assistance in this sharing of experienced wisdom by a wise marriage counselor and warm human being. Particularly helpful, and unusual in books of this type, is the discussion of the role of values and religious faith in marital relationships and personal development.

WILLIAM DOUGLAS

CALISTA V. LEONARD. *Understanding and Preventing Suicide*. Springfield, Ill.: Thomas, 1967. Pp. xii + 351. \$11.50.

A refreshing departure from statistics and anecdotes, this work assumes that the first step toward effective action is understanding of the issues involved. Suicidal behavior is presented in both a typological and a dynamic framework, in such a manner that guidelines for action emerge in a systematic way. The theory and methodology can be questioned, but the clinical suggestions provide an excellent orientation for anyone faced with recognizing or managing a suicidal person. Intensive psychotherapy may be somewhat overvalued by the author, while group therapy and the use of medications are not mentioned. The book is directed to those likely to encounter suicidal persons in the course of their professional life, and should provide a valuable resource for anyone in such a position.

JEROME A. MOTT

ADRIAAN VERWOERDT, MD. *Communication with the Fatally Ill*. Springfield, Ill.: Thomas, 1966. Pp. xi + 183. \$7.50.

Written by a psychiatrist for physicians involved in caring for the fatally ill, this book touches on a number of issues of vital concern to counseling and clinical psychologists. Of particular interest are sections on the personal meaning of fatal illness of the patient, problems of communicating stressful information, psychological reactions—including defense mechanisms—and religious and ethical issues connected with fatal illness.

WILLIAM DOUGLAS

EDWARD L. WALKER and WILBERT J. McKEACHIE. *Some Thoughts about Teaching the Beginning Course in Psychology*. Belmont, Calif.: Brooks/Cole, 1967. Pp. 84.

This paperback is titled in such a way that you correctly expect what to find in it. The authors are both experienced

in teaching and in research on teaching. Their brief book is written with a freshness, and a linkage with research, that makes it very worthwhile. There are discussions about the curriculum, possible goals for the course, and about a wide variety of tools for teaching. These considerations are a mixture of how-to-do-it and evaluation of the contribution any tool may make for a given purpose.

CLAUDE BUXTON

ALFRED L. YARBUS. *Eye Movements and Vision* (Transl. from Russian, of Rol' Dvizhenii v Protesse Zreniya, by Basil Haigh. Lorrin A. Riggs, Transl. Ed.) New York: Plenum Press, 1967. Pp. 222.

This is a Soviet doctoral thesis at its best, representing a synthesis of some ten years of productive research. The work was carried out in the Vision Laboratory of the Institute of Biophysics, USSR Academy of Sciences. The author, born in 1914, was awarded the degree of Doctor of Biological Sciences in 1964. He developed an original, ingenious technique for the creation of stabilized (stationary) retinal images and for the recording of eye movements. The technical aspects involving a variety of miniaturized optical systems, attachable by suction to the eye (the "cap" method), are described in detail. A chapter is devoted to the striking consequences for visual perception of the elimination of eye movements (rapid formation of an "empty field," with a disappearance of all visible contours and fading of color). The spatial and temporal characteristics of the rapid (saccadic) eye movements, taking place when the point of fixation is changed, are examined. The bulk of the book deals with eye movements studied in a variety of perceptual tasks (fixation on a stationary object, change of stationary points of fixation in space, perception of moving objects, and perception of complex objects).

JOSEF BROŽEK

ON THE OTHER HAND



NO SOUR GRAPES THIS TIME

I have always viewed with misgiving the degrading business of authors writing in to complain about reviewers who missed the point of their books. "Sour grapes," I've been saying. "Whiners. Why don't they take their punishment like men?" Now here I am, faced with a review (CP, July 1967, 12, 368) which—to say the least—raises serious questions about my *Social Psychology of Social Movements* (Bobbs-Merrill, 1965).

Naturally, my first reaction is that CP's reviewer missed the point of my book, but that is the Sore Loser Syndrome again. And I am determined to profit by criticism, which means facing up to weaknesses that would be more obvious to an astute reader than they would be to me.

So I have sat down to study the review. And I have studied it in conjunction with a favorable competing review, because this makes me feel better, and because I can in this fashion try to see my strengths and failings in combination. (The favorable review, incidentally, is by Ralph H. Turner, and appeared in *The American Sociological Review*. Turner is a respected authority in my field.)

I am writing this because my effort at self-evaluation has run into a snag. For instance, I find that CP's reviewer maintains that my book is but a "string" of "interchangeable" examples that "seldom demonstrate specific points," and are linked by "literate transitions" rather than substantive ideas. He goes further to maintain that "even the most obvious bridges between examples and explanations are omitted." This could be bad enough if the explanations were useful, but they aren't because "assertions . . . do not combine into a coherent framework." The examples thus "have to stand alone," and they have a tough time of it because "their sheer

number and redundancy" makes them a drag.

Fortunately my material seems to bore Professor Turner less than it does CP's reviewer. Turner tells me that "the rich and varied diet of illustrative material will surely keep student interest at a high pitch." Turner also fails to notice the lack of systematic thinking CP's reviewer points to. The book, says Turner, lays out "the problems and principles of a psychology of social movements," and does so through "the orderly development of propositions and the consistent application of a single approach." One nice sentence in Professor Turner's review that my publishers quote, which runs completely counter to CP's thinking, reads: "The book is a paragon of clear and logical argument; it is heavily interlarded with well-chosen and fascinating accounts from actual movements." In other words, I am to conclude that there is a systematic position developed in the book, and there is relevant "real life" material to support it.

What should I do now? In writing the *Social Movements* book I confess I had hoped to achieve what Professor Turner says I have achieved. I would be sorry if Turner were wrong and CP's reviewer were correct. And it would be nice if there existed some Court of Appeals for Conflicting Reviews to which one could go for an answer. Because here I am, facing the prospect (if CP's reviewer is right) of spending the rest of my life producing disconnected literary transitions.

HANS TOCH
Michigan State University



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- ABRAM, HARRY S. (Ed.) *Psychological aspects of surgery*. Boston: Little, Brown, 1967. Pp. xvi + 208.
- ADÁM, G., M.D., D.Sc. *Interception and behavior, an experimental study*. Budapest: Akademiai Kiado, 1967. Pp. viii + 152. \$8.00.
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NEW FOR SPRING FROM P-H

THE MANUAL OF CONTEMPORARY EXPERIMENTS IN PSYCHOLOGY

by Richard C. DeBold, Hobart College

Here is a book of experimental exercises based on current problems in psychology. The manual is self-explanatory and requires no direction by the instructor. Each chapter is written in order to provide a meaningful progression through the series of exercises so that the student is first introduced to problems of measurement and then taken through learning, memory, on to more complex problems of psychology. A watch, pencil, and paper are the only equipment necessary for the experiments.

March 1968 256 pp. Paperbound: \$5.50

PERSONALITY THEORIES: Models for the Description, Prediction and Influence of Interpersonal Behavior

by Albert Mehrabian, University of California, Los Angeles

The primary aim of this book is to delineate the processes which lead to the development of personality theories. Theories are grouped to show basic similarities in concepts, assumptions, and hypotheses. Dr. Mehrabian defines the concepts involved in the theories, indicates how measures of the concepts can be obtained, and explains what the mathematical relationships among the concepts can be. The student is provided with a conceptual basis for the critical evaluation of existing personality theories and some of the more central aspects of theory construction.

Summer 1968 approx. 256 pp. \$7.95

THERAPEUTIC PSYCHOLOGY: Fundamentals of Actualization Counseling and Psychotherapy, 2nd Edition, 1968, by Lawrence M. Brammer, University of Washington and Everett L. Shostrom, Institute of Therapeutic Psychology

The new edition of Brammer and Shostrom's widely adopted THERAPEUTIC PSYCHOLOGY reassesses the current status, trends, and problems in research and practice of general counseling and psychotherapy with normal and mildly disturbed people. The authors have updated findings based on rapid changes in the field and have expanded key topics such as counseling theory, values, and professional issues. They outline the development of their actualization counseling point of view. Excerpts from case studies illustrate principles and techniques.

June 1968 approx. 512 pp.

\$8.50

A Spectrum  Publication . . .

THE UNCONSCIOUS MIND: The Meaning of Freudian Psychology

by Benjamin B. Wolman, Professor of Psychology, Graduate Division of Long Island University; Dean of Faculty and Director of Research, the Institute of Applied Psychoanalysis

In this book, Benjamin B. Wolman provides a clear explanation of Freud's theories and techniques as they were created and as they are practiced today. He reviews the nineteenth-century's understanding of the unconscious, and describes the studies Freud made of slips of the tongue, dreams, free associations, and symptoms of mental disorders that freed psychology from misplaced interest in such ideas as "animal magnetism" and the demand for visible evidence of phenomena.

February 1968 256 pp.

cloth: \$5.95

Paper: \$2.95

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From Many, One?

John Cohen

A New Introduction to Psychology. New York: Hillary House, 1966. Pp. 220. \$5.00.

James Deese

General Psychology. Boston: Allyn & Bacon, 1967. Pp. xvi + 649. \$8.25.

Eugene Galanter

Textbook of Elementary Psychology. San Francisco: Holden-Day, 1966. Pp. xiii + 419. \$7.95.

Robert V. Heckel and Lelon J. Peacock

Textbook of General Psychology. Saint Louis: C. V. Mosby, 1966. Pp. xii + 480. \$8.50.

Ernest R. Hilgard and Richard C. Atkinson

Introduction to Psychology. 4th Ed. New York: Harcourt, Brace & World, 1963.

Robert L. Isaacson, Max L. Hutt and Milton L. Blum

Psychology: The Science of Behavior and Psychology: The Science of Interpersonal Behavior. (Combined volume) New York: Harper & Row, 1967. Pp. 815.

Richard A. Kalish

The Psychology of Human Behavior. Belmont, Calif.: Wadsworth, 1966. Pp. viii + 544. \$6.95. (text list), \$9.25 (Trade list).

Floyd L. Ruch

Psychology and Life. 7th Ed. Glenview, Ill.: Scott, Foresman, 1967. Pp. 758.

Floyd L. Ruch.

Psychology and Life. Brief 7th Ed. Glenview, Ill.: Scott, Foresman, 1967. Pp. 606. \$5.50.

Larry S. Skurnik and Frank George

Psychology for Everyman. Baltimore: Penguin, 1965. Pp. 128. \$.95.

R. N. Vyas

The Essentials of Psychology. Agra, India: Lakshmi Narain Agarwal, 1966. Pp. iv + 131. Rupees 5.

Reviewed by WALTER D. MINK and RAYMOND G. JOHNSON

John Cohen is Professor of Psychology, University of Manchester. James Deese is Professor of Psychology, The Johns Hopkins University. Eugene Galanter is Professor of Psychology at Columbia University. Ernest R. Hilgard and Richard C.

Atkinson are both Professors of Psychology at Stanford University. Robert V. Heckel is Professor of Psychology and Director of Clinical Training, University of South Carolina and Lelon J. Peacock is Professor of Psychology at the University of Georgia. Robert L. Isaacson is Professor of Psychology, University of Michigan; Max L. Hutt is Consultant, Michigan Department of Mental Health; and Milton L. Blum is Consulting Psychologist, New York City. Richard A. Kalish is Associate Professor, California State College at Los Angeles. Floyd L. Ruch is Professor of Psychology, University of Southern California. Larry S. Skurnik is Instructor of the University of Maryland in England and is located in London. H. H. Author, Frank George is at Bristol University. R. N. Vyas is in the Department of Philosophy and Psychology, Government Arts and Commerce College, Indore, India.

The reviewers, Walter D. Mink and Raymond G. Johnson, are both at Macalester College. Mink is Professor of Psychology and Johnson is Assistant Professor of Psychology. They both have taught the introductory course for many years, using large comprehensive texts, small systematic texts, and no texts at all. Both have PhD's from the University of Minnesota, both in clinical psychology.

THE compelling and stubborn problems of the beginning course in psychology have been thoughtfully documented by previous reviewers of introductory texts. The problems endure as do the courses and texts. So do the instructors who each year must face the task of wedding course and text or at least arranging for a temporary affair.

This year's collection of introductory texts is dominated by the familiar comprehensive treatment which apparently has the widest market. Isaacson, Hutt, and Blum present their two texts, unchanged, in a single book. Ruch and Hilgard and Atkinson submit revised editions of their standard works. Deese provides an expanded version of an earlier text. Heckel and Peacock offer a new entry. All of these works are as up-to-date as publication lead-time permits. If trends are to be noted in content, the most obvious are expanded treatment of the neural mechanisms in behavior, new emphasis on cognitive processes, and increased attention to early experience. The personal adjustment approach to psychology is represented by Kalish, the only example in this group. A break with convention is to be found in Galanter's book which occupies a category by itself and demands attention as the most unusual book to appear on the scene in many years. The remaining three books are not intended for the American introductory course but are interesting examples of what is provided in other parts of the world.

RUCH. The producer of a text that has the staying power to arrive at a 7th edition obviously knows what he is doing. As in the past, Ruch continues

to travel the middle road between the basic science of psychology and its application to those areas of experience which students report as the most interesting to them. In a review of the 6th edition the text was compared to a housing development where psychology lives. The current addition provides some modernization of facilities, a few new structures and complete redecoration of the interior. Since color coordination seems to be an important feature of some introductory texts these days it should be noted that maroon has replaced beige in this edition. The color change is not an altogether happy one. The black type on maroon ground used in section interfaces is hard to read and perceptually unsound.

The table of contents contains the old familiar topics though in a different order. The current prominence of physiological psychology is recognized by placing it in the second chapter. Theories of learning and theories of personality receive increased coverage. The "Frontiers in Psychology" with which Ruch continues to conclude his text are all new and appropriately brave. A briefer edition whose loss of weight includes social psychology, statistics and frontiers, is also available.

Ruch provides a time and market tested traditional topics-type text. While consumer appeal receives considerable attention the factual basis of general psychology is not neglected.

HILGARD AND ATKINSON. In this new edition of a well-established text there has been the addition of a collaborator as well as the expected updating of citations (40% are new to this edition)

and a change in interior decoration (greenish).

The general format and order of topics remains relatively unchanged. The expansion of some topics however reflect current emphases in psychology. A chapter on the physiological background of motivation has been added to the section on motivated and emotional behavior. The section on perception now includes a chapter on states of awareness. Psychotherapy is now surveyed in a separate chapter.

As a general survey of psychology this new edition is solidly packed with the information that is needed to represent the traditional topics of psychology and their recent developments. The authors provide a coherent blending of the facts of psychology and the conceptual frameworks from which they emerge. The approach of separating sections of critical discussion from the body of the text is continued. Since it is in these discussions that some students will find the challenge and controversy that may attract them to explore further it is wise to present the sections in an attention-getting way.

As a 'mainstream' text this edition indicates that the current is increasing but that flood-control is still possible. The instructor who continues to teach a general course in psychology will find that the authors have been aware of his problems. They also implicitly suggest that he will need to do his homework if he is to continue to chart a course through the waves of data.

DEESSE. General Psychology is not presented as a new edition of the author's previous *Principles of Psychology*, and its new design and title and ex-

panded size suggest it is a different book. However the order of topics and basic content are not markedly different from the earlier text.

Deese, like the other authors of basic introductory texts which are reviewed here, recognizes the current emphasis on the neural bases of behavior by treating the subject early and in some detail. The three major sections that follow cover basic processes, individual differences and man in a social environment. The author sees these sections as providing a good representation of the interests and activities of psychologists to students so that the reader can be aware of the differences that exist in the field. The point of view is maintained throughout that no satisfactory systematic framework for psychology has been provided yet. The problems of psychology are to be found in the specific questions which psychologists ask and the ways in which they attempt to answer them.

The style of writing and general format are straight-forward, uncluttered, and clear. The book fairly portrays the major themes of contemporary psychology in a substantial way. The author goes about his business in an unassuming, knowledgeable fashion that should inform and reassure students though it may not inspire or excite them.

ISAACSON, HUTT, and BLUM. Is psychology a natural science, a social science or both? For those who wish to present it as both, the authors' separate texts are now combined between the same covers. Except for a common index the combination is purely additive. Since the contents were reviewed in *Contemporary Psychology* previously when they were published as separate volumes (*CP*, March 1966, 11, 104; *CP*, Feb. 1967, 12, 58) the combination of the texts into a single volume is noted without further comment.

HECKEL AND PEACOCK. A clinician and a physiological psychologist have done a journeyman's job of putting together this survey, which makes no

serious effort to integrate the materials, as "no single view dominates the field." The authors express dissatisfaction with available texts, but it is difficult to find the unique aspects of their book. Most of the chapters show routine but sound handling of the material, with the nervous system and the senses getting more complete treatment than usual. They attempt to be comprehensive and fair to a variety of points of view and seldom take positions which would offend others. A Minnesota clinician, however, takes umbrage at their cavalier dismissal of objective personality tests—a position which seems inconsistent with their advocacy of objective as opposed to projective assessment of attitudes. The discussion of prejudice is placed in a context more easily related to the experience of southern white students.

The pedestrian writing style is generally clear, and the format attractive and business-like. There is no glossary but lists of appropriate Bobbs-Merrill and *Scientific American* offprints supplement each chapter. The first chapter on study habits is followed by sections on methodology (statistics, language of psychology) and on history of psychology. Pre-scientific history is given more space than most texts provide. There is a defect that pervades each of these first chapters which is endemic to similar texts. In an attempt to be complete, the treatment gets pedantic and encyclopedic rather than expository, leading, for example, to single sentence references to Loeb, Kulpe, and Carr.

The book lacks the market-tested sophistication that some of its much revised older brothers possess. Heckel and Peacock go after the large audience with yet another omnibus text; it is respectable, but may not capture our hearts.

KALISH. The author has designed introductory material aimed at students in junior colleges, nursing programs, as well as non-majors taking one psychology course. These students, Kalish feels, should be spared the jargon of the field, and want integration of research and non-research literature, i.e., application. "They are also concerned with understanding the human personality as a

possible aid in their future vocational and family roles. . . . Methodological matters and scientific studies are relevant to the extent that they broaden and deepen knowledge of the human personality and aid in its evaluation."

The principal sections of the book are: basic principles, development, effects of stress, and man and his society (chapters on career planning, group memberships, importance of values, and religious values). The format is attractive, the text well organized, there are frequent cross-references, and various attempts are made to actively involve the student in the material. A glossary is provided in addition to extensive appendices on how to study and orientation to college.

The author's viewpoint is that of Maslow. He refers to empirical studies frequently and liberally sprinkles case history material throughout the text. Combined with his occasional use of the second person, the effect is similar to that of Joyce Brothers talking to Johnny Carson. The book will not be harmful to its readers; it does not overly encourage them to 'psychologize' about themselves or others, but may not stimulate them to introspect; it takes a generally conservative approach to sex and religion (perhaps appropriate to the home state of the author which harbors Max Rafferty and Ronald Reagan); it will not lead the student to question the Establishment or middle-class values. Perhaps one flavor of the book can be found in the captions of some photographs: girl ironing a dress: "College often requires new responsibilities"; children eating slices of watermelon: "The satisfaction of a deficiency motive such as hunger, can still be fun"; a high school classroom: "Teen-agers spend a large proportion of their time in classes."

Doubtless a market exists for such a text. Likely many users will be non-psychologists who feel it provides what a student *should* get out of a psychology course. But for students of applied psychology there is precious little about operant conditioning. For gaining self-understanding there is virtually nothing to help him comprehend psychological testing.

More importantly the text leads the student to no increased sophistication

in dealing with psychological material—he will read the Sunday supplement with little more critical ability than before. He will neither be stimulated to pursue study in the field, nor will he be prepared for future courses, and will have a distorted view of the field of psychology.

COHEN. This slender volume is directed to a broad population of beginning students in British universities and colleges but particularly to future teachers. Typical American texts seem bulky and overdressed in comparison. The fact-packed content of most American books might benefit from Cohen's graceful and urbane style of writing.

The author has selected material which permits a blending of literary references, social commentary, and wise advice. He writes with confidence but at times dismisses issues and points of view in a cavalier fashion. The American reader may be jarred occasionally by what seem to be gratuitous digs at American culture and psychology. There is much to disagree with in Cohen's selection and presentation, but the general charm and erudition of his writing are enviable.

SKURNIK AND GEORGE. This small paperback was written as a text to accompany a British television series on introductory psychology for the layman. It is a very brief overview with a chapter listing similar to a standard text. The bias in terms of coverage is toward differential psychology; personality theory and measurement get more space than motivation, perception, sensation, and the nervous system combined. Any book that attempts to cover major topics in chapters of five small pages is bound to elicit screams of dissatisfaction from specialists regarding the treatment of their particular areas. The writing is generally concise and crisp, although the treatment of semantics and cybernetics seem poorly programmed. In all, however, the book provides a clear and respectable introduction to the discipline and would be a good book to give to the plumber next door who wants to know what psychology is. The plumber,

however, may have appreciated an index or bibliography for future reading.

Vyas. Reading this tiny book is like an excursion into the psychology of the 1920's. Here one finds McDougall and Woodworth almost unchanged by time. 'Temperament,' 'sentiment,' 'instinct' and other such terms in their older usages are reminders of how much the concepts of psychology, if not the problems, have changed. It would be unfair to make comparisons with contemporary American texts without some understanding of the Indian students and courses for which the book is intended. To view it as quaint is perhaps condescending. Contrasting its rough paper and flimsy binding with the glossy affluence of American texts is a compelling object lesson in values. The author attempts to present basic ideas of psychology to the general reader in the hope that more attention will be paid to its uses in everyday life. The inclusion of developments in psychology during the past 30 years would have added to the usefulness of the enterprise without detracting from its purpose.

GALANTER. For those who view each year's production of psychology textbooks with an overwhelming feeling of *deja vu* here is a book that is not just a new variation on a familiar theme but a new theme. Under the deceptively simple title of *Textbook of Elementary Psychology*, Galanter writes a version of psychology that may confuse many and outrage some. Whatever the reaction may be, however, no one can say that it is just another example of the 'same old thing.'

This book is no exercise in eclecticism or encyclopedia of psychological facts. Not only are most of the familiar topics missing but so are most of the familiar terms. In a provocative, exhilarating and sometimes irritating way the author invites the instructor and student to change their behavior and use their minds. Yes, here is a sophisticated mentalism.

Galanter's plan develops around two basic themes, choice and organization. 'Detection,' 'intention,' 'value,' and 'information,' are the kinds of terms that are presented and used consistently. Set

theory is introduced in the fourth chapter which should have been thumb-indexed since it is a necessary reference for most of what follows.

A math-modeling, cognitive psychology seems like a rich diet for students in an introductory course but it is prepared in an appetizing fashion. How it is served by the instructor may be another matter. The author modestly assumes that there may be twenty-five harmonious psychologists that are potential users of his book. The number may be a little higher but it seems likely that many instructors will find the contents curious and not related to the introductory course as they view it. Hopefully though, they will take the time to read thoroughly and think critically about the choice and organization that the author provides.

Perhaps Galanter has purposefully overdramatized his departure from the conventional approach to the beginning course in psychology and may lose a potential audience in the process. Most of the traditional problems and concepts are here though in different context or with slightly altered meanings. What are missing are the traditional facts. This is a strangely factless book and it is to the author's credit as a stylist that a reader will not generally regret their absence. The student who achieves the level of methodological sophistication and conceptual analysis which the author sets for him will not make life easy for instructors in his later courses in psychology.

What kind of summing up is possible? Perhaps what is most obvious about the majority of the texts is that consensus prevails. 'Sound,' 'respectable,' 'professional,' 'traditional,' these are the adjectives that are the most easily associated with them. 'Provocative,' 'stimulating,' 'revolutionary,' will have to be reserved (Galanter excepted) for future texts and future reviews.



If a man knows more than others, he becomes lonely.

—C. J. JUNG

Science and Self:

Two Objectives of Knowledge in Introductory Psychology Readings

James A. Dyal (Ed.)

Readings in Psychology: Understanding Human Behavior. 2nd Ed. New York: McGraw-Hill, 1967. Pp. xi + 500.

Richard A. King (Ed.)

Readings for An Introduction to Psychology. 2nd Ed. New York: McGraw-Hill, 1966. Pp. vii + 559.

Fred McKinney (Ed.)

Psychology in Action: Basic Readings. New York: Macmillan, 1967. Pp. xii + 564.

Robert L. Wrenn (Ed.)

Basic Contributions to Psychology: Readings. Belmont, Calif.: Wadsworth, 1966. Pp. xi + 308.

Reviewed by SIDNEY I. PERLOE

The editor of the first book listed here is James A. Dyal, Professor of Psychology at Texas Christian University. Richard A. King, editor of the second volume, is Associate Professor in the Department of Psychology, University of North Carolina. Fred McKinney is Professor of Psychology, University of Missouri. Robert L. Wrenn is Assistant Professor at the University of Arizona.

The reviewer, Sidney I. Perloe, is Associate Professor at Haverford College ordinarily, but at the current time is on leave at the Institute for Social Research, The University of Michigan. Perloe received his PhD in social psychology from the University of Michigan. His current research interest is in the impact of college upon students'

attitudes concerning social responsibility and participation in secondary groups.

THE VIRTUE of treating the four collections, being reviewed here as a set is that they highlight a choice among alternative goals for beginning courses in psychology that is often implicit or even unrecognized. Should the teacher design his course to present a picture of psychology which he and his colleagues regard as valid and which can serve as the basis of advanced work in the field? Or should the subject be used to broaden the student's understanding of himself and of human nature in general? To the extent that psychology is a science that produces insight into the determinants of behavior, the two alter-

natives are not conceptually inconsistent. But the gap between the promise of our science and its performance is great. As a result, what in theory is not a dilemma often becomes one in practice.

On the one hand there is the humanistic view which holds that important learning occurs only when the material being taught is relevant to the significant concerns of students. Today our work is much easier in this regard than it was twenty years ago because many of our students come to us already asking important questions about human existence and values. The task of psychology, or any other subject in the liberal arts curriculum, is to encourage the asking of these questions and to provide the student with guides in his search for answers. If we reject this obligation, we run the risk of alienating the student from either our subject or from himself. The latter occurs when he comes to view his questions as naive and replaces them with our professional frame of reference. In the first case he remains confused and uneducated; in the second he becomes informed but not liberally educated in the sense of having thought about the philosophical implications of what he has learned. Humanistic psychologists claim that there are many forces working toward the production of illiberally educated students. Perhaps the most important of these is the social reinforcement his academic success brings to us as professional psychologists. We are strongly motivated to produce students who perform precociously as undergraduates and who redound to our credit when they enter graduate school.

On the other hand, discipline-oriented teachers argue that it is precisely by giving the student an undiluted dose of our discipline that we help him maximize his human potentials and deal effectively with the world. Today, more than ever before, college freshmen and sophomores are quite prepared to deal on their own with the value relevance of the information they receive. Indeed, they are sometimes unable to rise above evaluation to the dispassionate appraisal of ideas. Our distinctive contribution as teachers should be to stretch the student's character and intellect so that he can look beyond considerations of

immediate personal relevance to considerations of a purely abstract, intellectual nature. We should try to help beginners experience the pleasure of dealing with ideas and problems regardless of their applicability to pressing concerns, just as our literary colleagues encourage the appreciation of a work in its own terms rather than in terms of the character of its author or of the society in which it was created. The proponent of this view might conclude by arguing that rather than distort our discipline to fit concerns students bring to us, we should do all we can to broaden the students so that they can incorporate the essential structure of our science.

A serious flaw present in both viewpoints is the reliance upon views of the student. Students differ in what they need to develop character and intellect. A teacher's decision about what to teach should depend not only upon his professional interests and long term pedagogical goals, but also upon the types of students he is likely to find in his classes. These types are not distributed randomly across institutions (McConnell and Heist, 1962; Petersen, 1965). However, the task of discovering what one's local sample of students need cannot be discussed here.

THE DIFFERENCE between the humanistic and "pure science" approach to introductory psychology has been discussed at some length because it defines the dimension which differentiates best among the four books of readings. King's collection lies close to the pure science end of the continuum. The book strives to correct the neophyte's mistaken expectations and impressions of psychology by presenting the field as an empirical, scientific discipline. There is explicit focus on students who intend to major in psychology and an implicit attempt to attract hard-headed, scientifically minded students to the field. The selections touch most of the important empirical and theoretical issues in modern psychology. It would provide seniors preparing for comprehensive exams with an excellent review of influential research.

Although some of the readings in the King collection may prove difficult for the beginning student, he will be helped considerably by the background material, definitions of statistical and technical terms and study questions which accompany each selection. Another aid to understanding will be found in the many charts and figures which have been added to the readings. The supplementary material in this volume is more substantial and instructive than in the other three. King sets a high intellectual level of aspiration for the introductory student and does a fine job of providing him with what he needs in working toward that level.

WHILE Wrenn's book resembles King's in purpose, it is rather different in design and execution. Wrenn's selection was made on the basis of a frequency count of references in five elementary texts. Most of the pieces included in the collection were referred to in at least four of the texts. The coordination of the readings with textbooks is helped further by charts which correlate the selection with the chapters of 18 introductory works. Although there is somewhat more bias toward classic pieces than in the other collections, there is still a good deal of current material. The supplementary comments are generally rather brief and not very informative. Students are also not likely to profit greatly from the study questions, which focus on details of design and methods rather than upon the contributions made by the article to the field. Wrenn's collection would prove useful as a substitute for sending students to the journals to look up references made in their introductory texts. It contributes relatively little beyond that.

McKINNEY agrees with King that students are often motivated to take elementary psychology for non-scientific reasons. However, he places himself on the humanistic side of our continuum by acknowledging the legitimacy of such motives. By including many articles that fulfill students' expectations about psychology, McKinney hopes to accom-

plish two ends. The first is to help the student in his existential task of creating meaning in his life. This is sought in part by means of the intrinsic interest value of many of the articles. In addition each reading is followed by a paragraph or two of "Implications" which comment upon and raise questions about relevant social and personal problems and issues.

The second goal of McKinney's collection is to entice the student into an involvement with the science of psychology. Many of the readings are from the standard psychological literature. These are accompanied by questions about the theoretical or empirical implications and by annotated bibliographies. Although the supplementary material should increase the scientific value of the collection, it does not bring it to the level of King's book.

It is very likely that an instructor could use McKinney's readings and editorial comments to stimulate discussions that allow students to see psychological processes *in vivo*. Whether such discussions would really move students along in their search for meaning or merely give them the opportunity to obtain some social reinforcement for their pre-scientific concepts about behavior still depends largely upon the skill of the instructor. The book provides a strong stimulus, but by itself probably will not guide students beyond their everyday level of thinking about behavior.

THE COLLECTION edited by Dyal is the most heterogeneous of the set. He proposes to provide articles that represent the major problems and approaches to psychology, that help to teach the methods of experimental and clinical psychology, and finally that modify students' conceptions of themselves and of mankind. Like Wrenn and King, Dyal has chapters that parallel those usually found in elementary texts. But the articles he includes under these headings are more likely to include non-empirical, theoretical, and interpretative discussions. In addition there is a final chapter entitled, "Cogent Commentaries," which contains 10 articles relevant to social, philosophical, and broadly scientific problems. All but the first and

last chapters are divided into three parts: biological, psychological, and socio-cultural. Although this is an attempt to provide an integrated view of human behavior, there is fairly little crossing of lines between the three sections of each chapter. In part this is a reflection of the nature of the field, but given the intention behind the threefold organization, it is surprising that more attention was not given to points of view concerning the relations among the several levels of studying behavior. The book's performance with regard to methodology also falls short of its promise. The readings illustrate a wide variety of methods, but there are few comments made about methods in the supplementary material. On the whole the value of the comments falls between King and McKinney on the one hand and Wrenn on the other.

As a final comparison among the four collections, it can be noted that, apart from Wrenn, the authors have performed some abridgement of the readings they present. Dyal and King index both names and subjects; McKinney indexes only subjects and Wrenn indexes neither.

Teachers who wish to present a pure science introductory course will find King very useful. Unfortunately, neither McKinney nor Dyal provide a humanistic counterpart to King's high level treatment, but either would be serviceable in pursuit of the self via psychology.

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Tests and Measurements. 1963. Pp. v + 116. \$1.95 paper; \$4.95 cloth.

Reviewed by EDWARD and KAY K. DEAUX

The first author, John B. Carroll, is Professor of Educational Psychology, Graduate School of Education, Harvard University. The second author, Donald Ross Green, is Associate Professor of Teacher Education and Psychology, Emory University. Julian E. Hochberg is Professor of Psychology, New York University. Ray Hyman, our next author, is Professor of Psychology, University of Oregon. William W. Lambert, the first of the two next authors, is Professor of Psychology, Sociology, and Anthropology, Cornell University while his brother, Wallace E. Lambert, is Professor of Psychology at McGill University. Richard S. Lazarus is Professor of Psychology, University of California, Berkeley. Sarnoff E. Mednick, our next author, is Professor of Psychology, University of Michigan. Conrad G. Mueller is Professor of Psychology at Indiana University. Edward J. Murray is Professor of Psychology at the University of Miami. Paul H. Mussen is Professor of Psychology, University of California, Berkeley. Julian B. Rotter is Professor of Psychology and Director of the Clinical Psychology Training Program, University of Connecticut. Edgar H. Schein is Professor of Management, MIT. Philip Teitelbaum is Professor of Psychology, University of Pennsylvania and Leona E. Tyler is Professor of Psychology and Dean of the Graduate School, University of Oregon.

The reviewers, Edward and Kay K. Deaux, a husband and wife team, received their PhD's from the University of Texas in 1967., Edward in learning and Kay in social-personality. Edward is now Assistant Professor at Antioch College and Kay is Assistant Professor at Wright State University.

IN his introductory statement, the editor of the Prentice-Hall *Foundations of Modern Psychology Series*, Dr. Richard Lazarus, points to the increasing awareness among psychologists of "the importance of reaching the introductory student with high quality, well-written, and stimulating material, material that highlights the continuing and exciting search for new knowledge." The use of a single text "that tries to skim everything—that sacrifices depth for superficial breadth—is no longer adequate," and the alternative, "a book that ignores many essential areas in order to present more comprehensively and effectively a particular aspect or view of psychology, is also insufficient." The solution to this dilemma, Lazarus feels, is the *Foundations Series* which "offers the advantage of tremendous flexibility and scope" and makes it possible for the teacher to "provide the student with a much fuller treatment of individual areas at the introductory level than is normally possible . . . without necessarily sacrificing breadth."

At first reading, these objectives sound admirable, and one cannot help but think that such a series of well-written and stimulating volumes would

ease the pain of introductory psychology, both for the student and the instructor. One does at times become distressed about the lack of depth revealed in a single-authored text in the coverage of one's own area; one likewise is fully aware that it is generally unwise to employ in an introductory psychology course the more narrowly oriented book of Lazarus's description, that which "ignores many essential areas in order to present . . . a particular aspect or view." However, after the first reading, one begins to realize both the artificiality of the textbook-quality dichotomy which Lazarus proposes and the lack of any real advantage that x volumes have over x chapters, as far as flexibility and scope are concerned. An instructor of introductory psychology rarely covers his single textbook from cover to cover, page by page, at any rate.

Since the expressed objectives of the *Foundations Series* become, with consideration, increasingly dubious, it might be thought that the failure to fulfill the expressed objectives would be an admirable way to circumvent the aims while still providing a worthwhile series, and most would agree to the charity of such a solution. It is unfortunate that in

not fulfilling the objectives expressed by Lazarus, Prentice-Hall published a 1637-page \$69.85 hard-bound monster (it should be pointed out, in all fairness, that a paperbound \$27.60 monster is available), which embodies fewer of the attributes than of the ills of the texts of Lazarus's dichotomy.

The reviewers feel that the primary cause of the *Foundations'* inadvertent failure to hit its self-set mark is that the series' fourteen authors, in attempting to write books which lead from introductory material to more detailed coverage of their area, more often than not produced volumes which, in themselves, fit Lazarus's dichotomy, with a survey which in part "sacrifices depth for superficial breadth" and in the discussion of other areas "ignores many essential areas in order to present . . . a particular aspect or view," usually that of the author. Thus it would appear that perhaps to validate the dichotomy, it was decided to replicate its existence not once, but a number of times. The worthiness of the second aim, that of flexibility, cannot be denied, although it is doubtful that the series' flexibility, from the instructor's viewpoint, is in actuality any greater than that of a multi-sec-

tioned, one-volume introductory textbook. It may, however, be considerably greater in the eyes of the student, who has to purchase separately each volume (or 'chapter') the instructor decides to cover. The value of this type of flexibility is questionable.

BEFORE consideration of the series as a whole is abandoned for analyses of the individual volumes, the possibility of employing the *Foundations* as a set of reference books should be considered. In its capacity as an introductory offering, it again fails, more often than not, by exhibiting a repeated combination of over-simplification and narrowness of approach, and it is just this pattern which makes most of the volumes unappealing as reading material for those who might look to the series as sources of reference. Thus it is unlikely that the *Foundations*, as a whole, will receive much popularity as a set of reference books (some volumes must be excluded from this generalization) until the time that they achieve some historical value.

Most of the individual volumes have been reviewed elsewhere soon after their original publication and are being reviewed here as a complete series. Since present space limitations are stringent, the major emphasis in considering individual volumes will be on the contribution made to the total series and the relation of the volume to other members of the series.

With respect to the two possible functions of the series—as introductory 'chapters' or as area reference source-books—a tripartite categorization of the fourteen volumes can be made. First, there are those books which, because of their accuracy, scope and level of presentation, could readily serve as reference volumes for the more advanced student seeking a focused review. A second category includes those volumes whose accuracy and scope reasonably fulfill the obligations of an introductory text, with the level of presentation and depth of coverage appropriate to the intended audience. Finally, there are volumes in the Series which the reviewers feel do not adequately serve either function, their deficiencies attributable to

various blends of selective bias, inaccuracy, and irrelevancy.

IN the first of these categories are the offerings of John Carroll, Edward Murray and Julian Rotter. Carroll's *Language and Thought* and Murray's *Motivation and Emotion*, in particular, provide the high level of coverage which is mandatory if the book is to serve as a worthwhile reference for the more advanced student.

Carroll's introduction to linguistics is succinct and accurate, although obviously pitched at something higher than the beginner's level.

The organization of the material in Murray's *Motivation and Emotion* is excellent, and the volume leads the reader, quite effortlessly, from the study of simple drives in simple organisms to succeeding more complex motives and emotions in more complex beings. Although not to be mistaken for a highly technical work, it can give the reader enough knowledge about many different approaches both to instill interest and provide a starting point for a more detailed study of the area.

Rotter's *Clinical Psychology* is quite successful in presenting the character and the complexities of an applied field of psychology, and might well encourage the novice to become a clinician without creating false illusions of curative powers.

Falling in the second category, that grouping which presumably reflects the original intent of the series, are exactly half of the volumes. Specifically, this number includes the works of Donald Green, Richard Lazarus, Conrad Mueller, Paul Mussen, Edgar Schein, Philip Teitelbaum and Leona Tyler.

One finds in the offerings of Tyler, Lazarus and the earlier-mentioned Rotter volume an unfortunate degree of overlap, an overlap which certainly could have been editorially avoided. Personality assessment, for example, is covered in detail in each of the three volumes, and while specific points may not be repeated three-fold, a more parsimonious division is certainly preferable.

Lazarus's *Personality and Adjustment* represents a condensation, revision, and

in many respects an improved version of the author's successful introductory adjustment text. While the inherent lack of definition of the area poses substantial problems, Lazarus largely overcomes the deficit with a careful blend of general background and specific research examples.

One may find fault Tyler's *Tests and Measurements* not for the quality of the author's pursuits, which is high, but for the choice of paths which she has made. Because this particular volume represents the only discussion of statistics that the student who is introduced to psychology via the *Foundations* series will have, more extensive coverage would be preferable.

Donald Green offers an adequate discussion of educational psychology, but in general he covers his allotted territory in an uncertain and unexciting manner. While not predominant, errors of both omission and commission do occur with some frequency. Most serious of the omissions are the paucity of research data in general and the extremely skeletal discussion of contemporary developments in computer-administered instruction, a topic which surely deserves more than a parenthetical paragraph.

Although making minimal reference to empirical data, *Organizational Psychology* by Schein provides a carefully-framed view of current 'industrial' psychology, blending older concerns for practicable methods with more recent sociological and social psychological theories.

Mussen's text on child development, designed, according to the author, "to give the reader with little or no training in the field a broad perspective of its objectives, scope, and contents," succeeds in fulfilling its aim but does so in an unfortunately dry manner. Although it covers a representative sample of child and developmental areas, the volume fails to excite or even interest a reader in the field, and, in the reviewers' opinion, this latter aspect of an introductory text is on a level of importance equal to that of providing information.

Both *Sensory Psychology* by Mueller and *Physiological Psychology* by Teitelbaum fulfill the requirements for a good introductory text in a specific area, although their approaches are considerably

different. Mueller's canvass of the area is just that; a coverage with space more or less equally allotted to the cells of a two- (psychology and physiology) by-five (the senses) design with one extra cell devoted to the "silent" (vestibular and kinesthetic) senses. The volume would indeed serve as a handy book for reference and review were it not for the tendency of Dr. Mueller to oversimplify and for the more or less casual way in which previous research is referenced. Teitelbaum's book is more personal and was thus found to be more interesting by the reviewers. Its quality is closer to that of Murray's book, and in its delimited coverage it is elevated above the introductory level. It is unfortunate that there is some material which receives coverage in both volumes, an occurrence which results from the series' faults if not intentions.

IN the third less-than-distinguished category must fall the contributions of Julian Hochberg, Ray Hyman, Wallace and William Lambert, and Sarnoff Mednick. None of these four volumes provides a useful guide for either the beginning or the more advanced student, and each in one way or another misleads the reader.

The faults in Hochberg's *Perception* involve, primarily, its biased approach and the overly selective use of data to support the bias. In the way of comparison, the reviewers found R. L. Gregory's *Eye and Brain*, which costs only twenty cents more than Hochberg's book, to be an ideal text, incorporating all the aspects intended by the Foundations series. Whereas Hochberg at best leaves the student with a vague feeling of having almost enough knowledge to understand a few perceptual phenomena, Gregory's book presents, in an exceptionally clear manner, a much larger amount of concise explanative material. The latter appears to be a much more worthwhile offering for both the introductory and the intermediate student.

Theoretically, the need for a volume on psychological inquiry is doubtful in a series with the *Foundation's* aims, for it is unlikely that the authors of the other books could (or would even attempt to) avoid their own methods of

inquiry in writing about their areas. And, in fact, the series' need for such a volume is reduced by the fact that several authors devote space to their ideas about inquiry. Having the distinction of trying to satisfy this questionable need is the contribution of Hyman, whose anecdotes, although interesting, are upstaged by his frequent and distasteful analogies to card sharks and magicians. The book does not favorably compare in any respect with the better known *Art of Scientific Investigation* by W. I. B. Beveridge.

For Lambert and Lambert, the principal aim in *Social Psychology* appears to be to acquaint the reader with the complexities of the field while ignoring the substance from which complexities might foreseeably arise. Most often, the authors introduce a topic via a maze of questions and subsequently view them through the lens of an out-of-focus analogy.

It is difficult to determine at what level of student Mednick's *Learning* is aimed. It is far too specific and full of cute, rather than clear, examples for it to be of any help to the beginning student and far too inaccurate, incorrect, and superficial for it to be of interest or assistance to the intermediate student. Mednick's failure to define clearly such basic concepts as classical and operant conditioning is only one example of this sadly confusing presentation.

Thus, the Prentice-Hall *Foundations* series as a 14-volume whole fails to offer a strong alternative to the standard introductory textbook, and while certain individual authors do attain a level equal or superior to such a text, the aspiration of the series proper must be considered largely unrealized.



There is an astonishing imagination, even in the science of mathematics. . . . We repeat, there was far more imagination in the head of Archimedes than in that of Homer.

—VOLTAIRE



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S. Stansfeld Sargent, Clinical
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79 Madison Avenue New York, N.Y. 10016

Psychological Man

Philip Rieff

The Triumph of the Therapeutic: Uses of Faith after Freud. New York: Harper & Row, 1966. Pp. x + 274. \$5.95.

Reviewed by RALPH W. HEINE

The author, Philip Rieff, is currently a University Professor of Sociology at the University of Pennsylvania but has also enjoyed teaching appointments at the University of Chicago, Brandeis, Harvard, and the University of California (Berkeley). A decade ago he was a Fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford, California and, more recently, a Fulbright Professor of Sociology at the University of Munich. Even more recently he spent a year as a Visiting Fellow at the Center for the Study of Democratic Institutions in Santa Barbara, California. Professor Rieff has had a long-standing interest in psychoanalysis as reflected by his editorship of the *Collected Papers of Sigmund Freud* and his authorship of an earlier book, *Freud: the Mind of the Moralizer*.

The reviewer, Ralph Heine, after many years at the University of Chicago, is now at the University of Michigan where he is a Professor of Psychology and Chairman of the Graduate Training Program in Clinical Psychology as well as Chief Psychologist in the Department of Psychiatry in the School of Medicine. He is a consultant to CP and has appeared from time-to-time in the journal as a reviewer or reviewee.

PHILIP RIEFF is one of those unusual scholars whose grasp of his subject matter and felicity of style are such that his work is found both in professional journals of the social sciences and the "little mags" devoted to social, political, and literary criticism. Earlier drafts and fragments of several of the

essays comprising *The Triumph of the Therapeutic* were, in fact, published in *Encounter*, *Commentary*, and elsewhere.

Prominent among the characteristics of the contributors to journals of criticism is a high level of ingenuity in discerning thematic trends in the heterogeneous literature lying along the sometimes indistinct boundary between the humanities and the social sciences. An essayist in this genre, for understandable reasons, is sometimes drawn to sweeping generalizations regarding contemporary man which would be difficult to support empirically.

Thus, when Rieff asserts that we are now well into the age of "psychological man," as contrasted with "Christian man" or products of other contemporary "moral demand" systems, it is unlikely that he would insist that the characterization applies to any large proportion of the members of any present-day society—most of whom are still struggling with the moral demands implicit in their various commitments to "communities" which presume to have the answers. Nevertheless, for that increasing cadre of individuals who are "psychological men" in the author's meaning of the term, this book will provide significant enlightenment and perspective on their status.

THE NOTION that the admirable life is the examined life has surely been entertained in every sophisticated society in every period of history. Following Freud, however, the object of self-study has not, uniformly, been that of dis-

covering and eliminating in oneself impediments to reaching whatever ideal state of being is culturally prescribed. Rather, intimate self-knowledge is viewed as the only means by which one can achieve freedom from an emotional commitment to goals arbitrarily defined by one's society.

The genius of Freud, according to Rieff, lay not in his technical contributions to psychotherapy, but in his rigorous, unfaltering rejection of the definition of the aims of psychoanalysis of that in society which is therapeutic at the expense of reason. His penetrating analysis of the deceptions man practices upon himself in order to accept and act on as rational what is in fact rooted in instinctual drives provided the essential foundation for examining those instances in which major cultural prescriptions are in collusion with rather than in opposition to unconscious motivations.

Perhaps the best example of Freud's undertakings in this direction is his dispassionate dissection of religious sentiments in *The Future of an Illusion*, in which he anathematized any effort to create a therapy based on psychology. It was in this conflict around this issue which led Jung to dissent and motivated his long effort to provide an acceptable cure for "the urban neurosis of atheism."

With admirable clarity and economy Rieff draws the essential distinction between the position of the authoritarian Jung for whom "anything despotic and inescapable is in this sense, 'God'" and that of Freud who, though pessimistic about man's capacity to escape the despotism of culture, never tried to make a virtue out of an unpleasant reality.

In Rieff's view, Jung, Adler, and Reich, each in his own way, rejected Freud's hard line, which in the end offered the suffering patient only the cool comfort of disillusion, in favor of an analytic process which leads finally to a "saving community." It surely cannot be said that Freud lacked the zeal to cure—indeed, he once observed that it is "justifiable to resort to more convenient methods of healing (than psychoanalysis) as long as there is any prospect of attaining anything by their means"—but he was absolutely un-

compromising in his judgment that (in the author's words) "there were no longer extant any communities wherein men could safely invest their troubled emotions in the hope of higher dividends."

Nevertheless, in his theory he envisioned a new kind of man who could achieve a substantial degree of detachment from his culture just as he could "manage" his instinctual drives in his own best interest. If man had to surrender cherished illusions in the process of analysis, he gained important freedoms to experiment with his life so as to maximize self-satisfaction.

THIS is the "psychological man" whose emergence, Rieff believes, has important implications for social and cultural change. The main thrust of the change comes from reexamination of the contents of the culture in terms of their therapeutic value. Psychological man is free of binding sentiments, kindly disposed toward and casually accepting of internal contradictions, devoted to reducing tension between personal aim and hard reality by making reality less hard. He is a connoisseur and a user of faiths and philosophies in the interest of his well-being.

Provided the government preserves the social order necessary for living the "experimental life" and maintains an economy of abundance, psychological man will have little interest in politics. The aims of "Democracy" and "Communism" would be seen as equally illusory and equally irrelevant to the aim of self-actualization.

It must be remembered that Freud (unlike Jung) sternly rejected the notion that there is emergent value in man's rigorous self-examination via psychoanalysis other than that he finds for himself in himself. Similarly, psychological man cannot be said to be achieving anything but motion—in the vernacular of the "Flower People," he just keeps doing his thing and trying to make it beautiful. No heroics, no martyrdom, no asceticism, no shame, no guilt, no sin, and, in the end, no ride on the Sweet Chariot. If any activity is therapeutic it is "in" and if it is not it is "out." The church becomes a therapeutic

institution, the theater is judged on the basis of its contribution to productive self-analysis and conflict resolution (indeed, psychodrama involving the audience may become the preferred form), the schools already place therapy virtually on a par with learning and will move farther in this direction. We shall have art therapy, bibliotherapy, music therapy, recreational therapy, dance therapy and, of course, some work therapy.

SOME professional readers of this book will have the (possibly chilling) awareness that what Rieff projects for the future is actually on the scene today. Rieff's "psychological man" is with us in sufficient numbers to have prepared the groundwork in the several institutions devoted to the care of the emotionally troubled. The current push toward "community psychology" extends considerably his scope of operation.

The author himself believes that in the final analysis it is the community which is therapeutic and it is his perception that virtually all neo-Freudian excursions have been in the direction of attempting to smuggle into the austere structure created by the master a bit of comfort in the form of consensually validated goals toward which the patient may struggle and, with enough treatment, ultimately reach. As Erich Fromm and others have observed, freedom in the sense of rigorous analytic detachment from any irrational commitment is not tolerable to most people. (Indeed, it may be logically impossible since one's knowledge of relevant contingencies is always imperfect and one of the uses of "faith" is to bridge informational gaps.)

Thus, while man may be entering into a period of psychologizing and, following Freud, will be alert to the traps inherent in the prevailing moral demand systems, it is not at all certain that he is not at the same time concocting new cultural prescriptions which will be just as binding.

Rieff does not pretend to be able to predict accurately the contents of a culture created by psychological man (although he offers some interesting conjectures), but he wisely observes that all

cultures in the past have incorporated a constantly changing balance of controls and releases, and he seems to have no doubt that cultures in the future will also.

Causation Versus Aims

A. R. Louch

Explanation and Human Action.
Berkeley & Los Angeles: University of California Press, 1966.
Pp. viii + 243. \$6.95.

Reviewed by JOHN BUCKLEW

A. R. Louch, who is Associate Professor of Philosophy in the Claremont Graduate School and University Center, obtained his PhD in philosophy from Cambridge. He has published several articles on the topics taken up in his book and currently is doing research on the general concept of explanation as it functions in science and everyday life.

The reviewer, John Bucklew, is Professor of Psychology at Lawrence University in Wisconsin. He is currently doing research on multivariate analysis of case histories. His book, *Paradigms for Psychopathology*, was published in 1960 by J. B. Lippincott Company.

PSYCHOLOGISTS concerned with philosophic influences on their science have probably been more aware, on the whole, of phenomenology-existentialism and the philosophers of science (the logical positivists and American pragmatists) than they have of the particular strand of modern philosophy represented by Professor Louch. He traces his descent from Wittgenstein and, more recently, the late John Austin. Wittgenstein, in common with the logical positivists, rejected classical metaphysics as meaningless but found a middle road for philosophy in the analysis of the subtler meanings of concepts, analyses

ponderous notations of set theory and propositional logic. For this reason, the writing style of Wittgenstein, Austin and (we must add) Professor Louch may seem unnecessarily discursive and tedious.

According to Professor Louch, the scientific method borrowed from physics by psychology and the social sciences explained a concrete case by bringing it under a general law that stated its causation. Wittgenstein, contrariwise, defined explanation as the bringing together of a group of cases under a common aim, the purpose of this being to make a problem clear or intelligible. The author argues that in the realm of human action (a term he prefers to 'behavior') we are faced with value-facts rather than facts of sheer physical movement as the physicist might see them. Thus, observations on actions must be in the nature of assessments which imply concrete aims, goals, moral judgments; a generalized causality concept misses the point and cannot be made to work.

In the very pluralism of theories, constructs, and data of psychology Louch sees its negation as a science striving manfully to emulate physics. The result has been triviality and a vast conceptual confusion. Thorndike's law of effect, for example, is dismissed as a "pompous rendering of a platitude" (p. 30) and Hilgard's statements of the most-agreed-upon generalizations about learning are cited as instances of the "redundancy-platitude dilemma" of modern psychology (p. 36). Surely, it is asserted, we have a right to expect more of an elaborate experimental science.

Freudian psychoanalysis, when applied to the individual case, is intuitive and *ad hoc*; as a theory it is a species of moral persuasion, bound by specific contexts and lacking in generality (p. 217). Space limitations prohibit mention of the critical analyses of other important topics but special interest attaches to the author's treatment of feelings and motives, both because they are basic to his concept of value and because of the special ontological status given to them in the philosophy of John Austin. The author appears to accept a contextual definition of feelings and motives, which means to him that they

cannot be accorded causal status, but grants that they are knowable on the same basis as any other category of action, and could conceivably be programmed into Michael Scriven's computerized (non-existent) 'android.' Mechanical men assimilated almost completely to human beings, however, are beside the point. Eventually, we would merely classify them as a variety of the human species and asked the same philosophic questions about the meanings of their actions.

HAVING disposed of the suitability of a deterministic law conception of human action, one might expect that the author would welcome a statistical decision-making approach. Not so, however. In a brief chapter he confines his attention to game theory only, and within this limitation, devotes most of his time to analyzing the extended, metaphorical applications of game theory. Unsatisfactory as his treatment of this scientific model is, a major point in his critical analysis emerges more clearly. Game theory models must be plural and limited because the options depend upon situational factors—things outside the organism—and hence the predictability of general laws is lost. We are left knowing only what a person will probably do (assuming he will follow a maximization definition of rationality) in a such-and-such artificial, laboratory situation. Trivia again!

Many points might be offered in rebuttal to Louch's arguments. He overstates and distorts psychology's dependency on the classical, deterministic paradigm of science. It is reductionistic, for instance, and psychologists have been making hay for over 30 years with non-reductive models. He does not grant psychology's modest successes in validating results beyond the immediate situation and he ignores the possibility of generalizing by the addition of more variables (for example, the recent solution of the Prisoner's Dilemma by generalization to more options). He seems unaware of the work of the multivariate analysts who are achieving generality by uncovering simple, stable, structures. On his constructive side, he fails as yet to develop an adequate

theory of the relation of values to facts, which he intends as his chief contribution. He speaks of them (p. 54) as being "merged" in the act of observation—surely a weak metaphor by his own standards of critical analysis.

Useful as it may be, the reviewer does not feel that this philosophic approach, by itself, can achieve a viable alternative to scientific psychology. In terms of Wittgenstein's view of the nature of explanation, Louch cannot 'disprove' the scientific character of psychology; he can only make it seem unpalatable—which he has done adroitly—and seek to set it aside in favor of the more conventional ways by which human beings communicate and understand one another. We might turn his voluntarism against him and conclude merely that he does not want a predictive science of human behavior and thus adds his voice to the growing chorus of critics, both within and outside of psychology, who see it only as an engineering *bête noire* dedicated to the overthrow of human freedom. Raymond Cattell has forecast somewhat ominously the coming division of psychology into a philosophic-humanist-popular psychology and a technical-mathematical-scientific psychology. If so, Louch's book must be reckoned another counter in the divisive process.

No Talking

Rudolf Kaelbling and Ralph M. Patterson

Eclectic Psychiatry. Springfield, Ill.: Thomas, 1966. Pp. xv + 891. \$17.50.

Reviewed by JOSEPH F. THORPE

The authors, Rudolf Kaelbling and Ralph M. Patterson, are at the Ohio State University College of Medicine.

Kaelbling is Associate Professor of Psychiatry and Assistant Professor of Neuroanatomy and Patterson formerly of the University of Michigan, is Professor of Psychiatry.

The reviewer, Joseph F. Thorpe, is Associate Professor of Psychology, Emory University. He received his PhD from the University of Texas at Austin and says that he can claim no special competence or background relevant to this book other than that he too has assiduously practiced eclecticism in his dealing with the more peculiar forms of human behavior.

THIS volume is offered as a practical outline of clinical psychiatry for use in the diagnosis and treatment of mental disorders and is directed primarily to students and practitioners of general medicine who lack formal psychiatric training. The authors' aim is the integration of psychiatry with the rest of medicine and their approach is avowedly eclectic and practical, with emphasis on the latter. Normal personality development, the concerns of psychology, and the more impractical treatment procedures are dealt with only to the extent that they have direct relevance to coping with the variety of emotional disorders faced by the front-line practitioner.

In terms of the order of topics, the organization of the book creates a degree of disjointedness. However, this dislocation is likely an inevitable characteristic of the eclectic approach and presents no serious discomfort to the reader, particularly the psychiatrically naive.

The volume begins with a comprehensive discussion of the disruptive effects of both physical and emotional stress following which are several chapters on the major biological and sociocultural factors influencing personality development and deviation. Also presented are brief expositions of rather divergent theoretical models of personality. The latter remain isolated from the main text, perhaps appropriately so. Considerable space is given to a detailed discussion of the symptomatic dimensions of psychopathology—disorders of affect, speech, thought, intellectual and psychomotor functioning—

with emphasis on distinguishing between normal individual variations and significant pathological deviations. This section should be of considerable value to the general practitioner in his attempts to identify and evaluate the often subtle peculiarities of behavior and mood which bespeak of emotional disturbance. This discussion leads to a comprehensive review of the major clinical psychiatric syndromes, following the current system of classification. Special attention is given to the neurological and physiological correlates of emotional disturbances as well as to the spectrum of psychophysiological disorders. This emphasis is repeated in the section on

the somatic therapies, primarily through the coverage of the types and effects of psychotropic drugs. The 'talking' therapies are considered also but, again, with an eye toward the practical realities and time limitations of most patient-physician contacts. Accordingly, problems in the management of psychiatric emergencies receive their due.

Additional topics covered are the relationship between the law and psychiatry, at too great a length, and psychiatric consultations, too briefly. Over-all, the coverage is extensive and sufficiently detailed to meet quite adequately the authors' purposes for the intended audience.

Paperback Pellet

By JOYCE HOFFMAN

HEREWITH a mini-review—the shortest ever from this reviewer. The reasons for this are several. The state of the paperback field at the moment, rather than the attention of the reviewer to pool-halls and bar-rooms, is the crux of the matter.

One long-term fact is that more and more softshells are originals, and so belong in the regular review process rather than here. Another, and happy, thing is that there are currently less hastily assembled collections of readings turning up in softback.

A short-term reason (though it happened once before) is that this past half-year turned out a lot of material which should go under the general heading of pseudo- or quasi- or non-psychology of the sensational sort that turns up on the psychology shelf of the bookstore, but certainly does not belong there. Bad psychology deserves a warning review here, but nonpsychology de-

serves nothing here, and this six months was top-heavy with it.

So here is the psychology we have to offer, along with comments on a few. We shall see what the next six months may bring.

HOWARD BECKER. (Ed.) *The Other Side: Perspectives on Deviance*. Free Press, 1967. Pp. 297. \$2.45. Reprint (Original 1964).

PETER BERGER and THOMAS LUCKMAN. *The Social Construction of Reality*. Anchor, 1967. Pp. 219. \$1.25. Reprint (Original 1966).

HERBERT BLOCH and MELVIN PRINCE. *Social Crisis and Deviance: Theoretical Foundations*. Random House, 1967. Pp. 172. \$1.95. Reprint (Original 1952).

When social crises arise, either some adaptation will take place to stabilize

events within usual cultural guidelines or it will not, and behavior deviant from the usual norms will arise. Given this as a premise, Bloch and Prince then go on to suggest the likely conditions for either of these outcomes, paying particular attention to the role of the family as a prime shaper of social responses, including those to crisis. Although this book is put out by Random House in the Sociology Series, it can be read with profit by psychologists interested in culture and personality and the relationship between them.

JAMES BRUSSEL. *The Layman's Guide to Psychiatry*, 2nd Ed. Barnes and Noble, 1967. Pp. 276. \$1.95. Reprint (Original 1961).

As Paul Hoch duly notes in his prefatory remark, this book is for the educated layman. It has avoided the simple glibness which often bedevils books about complex subjects intended for the uninitiated. Provided the reader makes use of the fine short glossary at the back, he will get a good introduction to psychological problems, their origins, and what can be done about them. If one allows the absence of a reference list, this is not a bad book for an undergraduate thinking about the clinical area for graduate school.

LEON FESTINGER, STANLEY SCHACHTER and KURT BACK. *Social Pressures in Informal Groups*. Stanford Univ. Press, 1967. Pp. 197. \$1.95. Reprint (Original 1950).

'Welcome Back' for another pioneer. This study of the Westgate housing projects represented several methodological 'firsts' in the attempt to understand how groups develop, how they develop and regulate norms, how interaction patterns arise, and what determines the nature of the interaction. The student of group dynamics should own this one, and now can.

DALE HARRIS (Ed.) *The Concept of Development*. Univ. of Minnesota Press, 1967. Pp. 287. \$2.75. Reprint (Original 1957).

What do we mean by development? Of what utility is the concept in our field of study? What is that course in

'Comp. Development' or 'Developmental Child' really about? In this volume, seventeen contributors from a variety of disciplines give formulations and viewpoints on the concept of development as it is employed in their discipline, which in turn we can understand as it is useful in ours. Contributors include John E. Anderson, Viktor Hamburger, T. C. Schneirla, Heinz Werner, Robert Sears, Willard Olson, Ernest Nagel, J. P. Scott, the editor, and others. Solid and useful.

BÁRBEL INHELDER and JEAN PIAGET. *The Growth of Logical Thinking from Childhood to Adolescence: An Essay on the Construction of Formal Operational Structures*. Basic Books, 1967. Pp. 356. \$3.95. Reprint (Original 1958).

Another 'Welcome Back,' this time to the elegant studies documenting the transition in childhood thinking which leads to the adolescent ability to entertain logical propositions as the basis of reality categorizing. The more paperback Piaget, the merrier. Negative 'brownie points,' however, to Basic Books for the shaky state of binding on this fairly thick volume.

CHARLES JOHNSON. *Growing Up in the Black Belt*. Schocken, 1967. Pp. 358. \$2.45. Reprint (Original 1941).

What was it like to be a Negro growing up in the South of the late '30's? Johnson and his associates did a study of 2,000 young Negro people in the rural South. The picture derived from the data was one of hate, fear, longing to escape, and hopelessness that escape would ever be. While the book is better than a quarter century old, and though technology has wrought changes on Black Belt farming, the picture is not so very different from today save, perhaps, that today's Negro youth is a little more hopeful about escape. An historic, but living document.

MIRRA KOMAROVSKY. *Blue-Collar Marriage*. Vintage, 1967. Pp. 397. \$1.95. Reprint (Original 1962).

Komarovsky reports her findings from a study of fifty-eight blue-collar, stable marriages. This study works to fill the

gap in our knowledge of this group. We get plenty of reports on this class-level, but they are mostly concerned with the broken, disorganized, criminal segment of the group, rather than the mass of 'solid' people and marriages studied here. Probing via the case-study method these peoples' sexual, social, parental, familial, recreational, occupational and economic life facets, Komarovsky gives us a feel for this large but little-studied portion of our population.

KONRAD LORENZ. *On Aggression*. Bantam, 1967. Pp. 306. \$1.25. Reprint (Original 1963).

A. R. LURIA. *The Nature of Human Conflicts*. Washington Square Press, 1967. Pp. 431. \$1.45. Reprint (Original 1932).

'Welcome Back' once more, this time to Gantt's translation of Luria's careful experimental treatment of the psychobiology of people undergoing stress and conflict. Although we usually think of Luria in the realm of neurophysiology, we find here, too, a discussion of the sociocultural framework of conflict, and Luria's assertion that we must understand conflict in both social and neural realms if we are really to grasp its nature clearly.

MAURICE MERLEAU-PONTY. *The Structure of Behavior*. Beacon, 1967. Pp. 256. \$2.95. Reprint (Original 1942).

A philosopher in a phenomenological tradition examines the structure of consciousness and its perceptual substrates, and makes a partly existential argument for a different approach to the study of behavior than he thinks psychologists presently undertake. Merleau-Ponty can get us, via his reasons, neatly off the hook of the mind-body problem, but in so doing he will markedly revise our ideas of both the domain and the doings of experimental approaches to the study of behavior. A tough but thought-provoking book.

JEAN PIAGET and BÁRBEL INHELDER. *The Child's Conception of Space*. Norton, 1967. Pp. 488. \$2.95. Reprint (Original 1948).

And here again is Piaget, this time explaining the development of the way in

NEW FOR SPRING FROM P-H

THE MANUAL OF CONTEMPORARY EXPERIMENTS IN PSYCHOLOGY

by Richard C. DeBold, Hobart College

Here is a book of experimental exercises based on current problems in psychology. The manual is self-explanatory and requires no direction by the instructor. Each chapter is written in order to provide a meaningful progression through the series of exercises so that the student is first introduced to problems of measurement and then taken through learning, memory, on to more complex problems of psychology. A watch, pencil, and paper are the only equipment necessary for the experiments.

March 1968 256 pp. Paperbound: \$5.50

PERSONALITY THEORIES: Models for the Description, Prediction and Influence of Interpersonal Behavior

by Albert Mehrabian, University of California, Los Angeles

The primary aim of this book is to delineate the processes which lead to the development of personality theories. Theories are grouped to show basic similarities in concepts, assumptions, and hypotheses. Dr. Mehrabian defines the concepts involved in the theories, indicates how measures of the concepts can be obtained, and explains what the mathematical relationships among the concepts can be. The student is provided with a conceptual basis for the critical evaluation of existing personality theories and some of the more central aspects of theory construction.


Summer 1968 approx. 256 pp. \$7.95

THERAPEUTIC PSYCHOLOGY: Fundamentals of Actualization Counseling and Psychotherapy, 2nd Edition, 1968, by Lawrence M. Brammer, University of Washington and Everett L. Shostrom, Institute of Therapeutic Psychology

The new edition of Brammer and Shostrom's widely adopted THERAPEUTIC PSYCHOLOGY reassesses the current status, trends, and problems in research and practice of general counseling and psychotherapy with normal and mildly disturbed people. The authors have updated findings based on rapid changes in the field and have expanded key topics such as counseling theory, values, and professional issues. They outline the development of their actualization counseling point of view. Excerpts from case studies illustrate principles and techniques.

June 1968 approx. 512 pp.

\$8.50

A Spectrum  Publication . . .

THE UNCONSCIOUS MIND: The Meaning of Freudian Psychology

by Benjamin B. Wolman, Professor of Psychology, Graduate Division of Long Island University; Dean of Faculty and Director of Research, the Institute of Applied Psychoanalysis

In this book, Benjamin B. Wolman provides a clear explanation of Freud's theories and techniques as they were created and as they are practiced today. He reviews the nineteenth-century's understanding of the unconscious, and describes the studies Freud made of slips of the tongue, dreams, free associations, and symptoms of mental disorders that freed psychology from misplaced interest in such ideas as "animal magnetism" and the demand for visible evidence of phenomena.

February 1968 256 pp.

cloth: \$5.95

Paper: \$2.95

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which the child grasps space and objects in it. Probably Piaget will stand long unchallenged for the simple beauty of investigation which lays bare cognitive development in many spheres. Certainly psychologists should be reading this. Maybe people who write geometry texts should too, since it appears that the natural order in which a developing human attacks the organization of space varies remarkably from that which geometry texts impose upon the student.

S. B. SARASON, et al. *Anxiety in Elementary School Children*. Wiley Science Editions, 1967. Pp. 351. \$2.65. Reprint (Original 1960).

In an age in which parents get so eager so early for academic achievement in their children, it is not surprising that school children may be anxious. This study, which focuses upon anxiety around test-taking situations, casts light upon the genesis of such anxiety in the relationship between the child and his parents. It notes the relationship of anxiety not only to the test situation but to the child's self-concept, which again goes back to the parent-child situation in large measure. It is not only the poorly performing child, but the good performer as well, who may be anxious. Valuable suggestions are generated both in regard to how parents might relate to their school-anxious child, and in regard to the structuring of testing situations. Solid.

WLADYSLAW SLUCKIN. *Imprinting and Early Learning*. Aldine, 1967. Pp. 147. n.p. Reprint (Original 1965).

WILHELM STEKEL. *Auto-Erotism*. Washington Square Press, 1967. Pp. 203. \$1.45. Reprint (Original 1950).

— *Compulsion and Doubt*. Washington Square Press, 1967. Pp. 608. \$1.45. Reprint (Original 1949).

Washington Square Press continues to bring out further portions of Stekel's ten-volume *Disorders of the Instincts and the Emotions*. *Auto-Erotism* is a portion of Volume II, and *Compulsion and Doubt* is the final volume of the series. The most notable quality of these books is that, although they represent an older school of psychoanalytic orien-

tation, they have a very modern bent in their insistence upon a consideration of socio-cultural determinants of behavior.

W. I. THOMAS. *The Unadjusted Girl*. Harper, 1967. Pp. 260. \$1.75. Reprint (Original 1923).

This is a relatively old book in which Thomas undertakes to examine factors which underlie delinquent behavior. He suggests that people attempt to take behavioral paths to need satisfaction, that these paths are more likely to be idiosyncratic in a society with disorganized social forms, and that sometimes the result will be need gratification in unacceptable social forms. Though a sociologist, Thomas, writing in the '20's, emerges as a stout adherent of behavioral analysis in attempting to understand the delinquent girl involved in socially 'pathological' behavior. Still interesting.

EDWARD TIRYAKIAN (Ed.). *Sociological Theory, Values, and Sociocultural Change*. Harper, 1967. Pp. 302. \$1.95. Reprint (Original 1963).

New Wine in an Old Bottle

George M. Guthrie and Pepita Jimenez Jacobs

Child Rearing and Personality Development in the Philippines. University Park, Pa.: Pennsylvania State University Press, 1966. Pp. vi + 223. \$7.50.

Reviewed by LEIGH MINTURN

The first author, George M. Guthrie, received his PhD at the University of Minnesota and has taught since at Pennsylvania State University where he

is Professor of Psychology. During 1959-60 he was a Fulbright Professor at the Philippine Normal College in Manila. He is author of *Philippine Child and Philippine Society*, second author, *Pepita Jimenez Jacobs*, at the time of the study was a member of the Child Study Center at the Philippine Normal College. She has completed her PhD at Pennsylvania State University and is teaching at Marygrove College.

The reviewer, Leigh Minturn, has worked in the field of sociocultural studies of socialization and personality development since 1951. She received a 1953 Radcliffe PhD. She has taught at Cornell University and at the State Teachers College in New York, and at the University of Illinois at Chicago. She is now Professor of Psychology at the University of Colorado, Boulder. She is co-author with William Lambert of *Mothers of Six Cultures: Antecedents of Child Rearing*, and with Hitchcock of *"The Rajputs of Khajuraho, India,"* in Whiting's *Six Cultures*.

THIS BOOK is a report on child training practices of a group of Tagalog-speaking Philippine mothers based on responses to an interview schedule derived from the one used by Sears, Maccoby and Levin (1957). The authors say they have three purposes: "to describe patterns of relationships between Philippine mothers and their children, to compare these data with American findings, and to examine results to see if they shed any light on problems of personality formation in both Philippine and American cultures."

Most of the text is devoted to the first purpose. The mothers' responses are reported fully for a variety of child-rearing problems; e.g. feeding, dependency, obedience, cleanliness, sex-role training, anger.

Comparison of the data with "American findings" is limited to a comparison with findings of Sears, Maccoby and Levin, appearing at the end of each chapter. It is regrettable that, despite a review of other Philippine studies, the authors never compare their findings with those of Philippine samples, particularly that of the Nydeggers who

gave a comparable interview to a group of Ilocano speaking mothers (1963).

The third purpose is expressed chiefly in the conclusions where the authors summarize the differences between Philippine and American personality. In the discussion and the comparison sections the authors ignore the sampling limitations of their study and that of Sears, Maccoby, and Levin and discuss them as if both samples were representative of their respective cultures. Despite an emphasis on the advisability of using culture-based concepts the interview follows the format of the American study and these concepts are limited chiefly to a scattering of untranslated Tagalog terms appearing in the conclusions. The discussion is not closely tied to interview material and contains a number of statements which are not obviously based on reported data.

The most serious fault of the book is the absence of adequate reports concerning methodology in the development of the interview schedule, sample, and data analysis.

THE INTERVIEW was pretested by 200 practice teachers, after only four hours of training, and revised on the basis of their protocols. The revised interview was given to another practice teacher group, of unspecified size, who interviewed two mothers each. The final report is based on interviews by thirty students who were selected from this group by the faculty, as those "who were deemed the ablest and most reliable" (page 46). These thirty students interviewed 10 mothers each and produced 179 usable interviews.

No report of the training of these 30 interviewers is given although there are indications that they were not skilled. Eleven interviews were not completed and one interviewer lost all of her protocols. Fifty-two percent of the interviewers skipped the questions concerning reproduction and other interviewers distorted the questions because of embarrassment. Furthermore, interview procedure was not uniform. About one half of the interviews were written in Tagalog and one half were partially carried out in Tagalog but written in English. No explanation is given for

this variation nor is there any discussion of translation problems.

The sample consists of mothers of first grade children, all living in provinces adjacent to Manila, classified into three groups on the basis of education. Each interviewer drew her sample from the class role in her training school. Alternate selection was permitted. No description of sampling of schools is given. The sample is balanced by children's sex but not by mother's education. No reliability checks on interviewing are reported.

THE entire coding reliability report is contained in three short paragraphs (pp. 49-50) and includes only a report on average reliability across all coding categories. It is based on test-retest reliability for 15 interviews after all coding was completed. There is no mention of number of coders used and there was evidently no check on inter-coder agreement. There is virtually no discussion of the development of coding categories. The entire interview, including the coding categories is contained in the appendix.

The authors state that they "have interpreted the results of our interviews but have resisted the temptation to present a percentage-by-percentage discussion." The percentages of responses in various categories are referred to throughout the text but are never presented systematically, even in the appendix, where they could easily have been included along with coding categories. The percentages which are presented are sometimes based on numbers of less than ten. The text includes a wealth of quotations from the interview, but in the absence of systematic quantitative results, these quotations and their interpretations are difficult to assess, particularly since the breakdowns by sex of child and educational level of mothers are often omitted. The authors often refer to the "Westernization" of the child rearing attitudes of their mothers but present no clear criteria for distinguishing between Philippine and Western ideas.

In summary, the book describes an interesting study, poorly conducted. It

is saved only by the excellence of the model it imitates.

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The Testers Meet Again

Invitational Conference on Testing Problems. Julian C. Stanley, Chairman. Princeton, N. J.: Educational Testing Service, 1967. Pp. vii + 123. \$1.50.

Reviewed by GEORGE K. BENNETT

The reviewer, George Bennett, did his graduate school work at Yale. He joined The Psychological Corporation in 1936 and has been its President since 1947. He is author or co-author of more than twenty tests and about one hundred journal articles. At various times he has been a member of The American Board of Examiners in Professional Psychology, President of the New York State Psychological Association and President of three APA divisions (5, 14, and 19). He has twice appeared on the program of the Invitational Conference and was Chairman in 1952.

THE Invitational Conference on Testing Problems had its origin in 1936, when the Committee on Measurement and Guidance of the American Council on Education arranged a meeting of "state testing leaders," attended by 19 persons. Since that time the Conference has grown mightily, to 939 per-

sons in 1966, among them survivors from those earliest years.

During these years the meetings have necessarily become more formal while the content has broadened from the construction and use of tests to a wider range of educational topics. The present name was adopted in 1941, and sponsorship was assumed by the Educational Testing Service in 1948. An anthology of outstanding papers presented between 1947 and 1964, edited by Anne Anastasi, was published by the American Council on Education in 1966. The Chairman for 1966 was Julian C. Stanley.

At the 1966 meeting, the morning session, entitled "Innovation and Evaluation," opened with a prospectus of the Institute for Educational Development presented by its President, Nils Y. Wessell. To some extent an offshoot of ETS, the Institute sees its role as bringing together the business community, the educational world and government agencies to "ensure the full realization of their resources." Businessmen will be particularly grateful for Dr. Wessell's generous recognition that "unfounded suspicion of all firms is not the best route to effective rapport."

Next, Henry Dyer, in observations well deserving of attention and support, pointed out that the vague and general language in which educational goals are stated constitutes a barrier to progress and prevents evaluation of educational accomplishment. Martin Trow, in a thought-provoking discussion, stressed the importance of investigating the long-range impact of mass higher education on American society. Eugene Webb emphasized the value of using multi-source data to improve the meaningfulness of observations. He went on to speak of "outcroppings"—convenient groupings for the study of phenomena occurring infrequently in the population as a whole. The final paper of the morning session, by John Holland, described a means of predicting nonacademic achievement among college students through questionnaires concerning such activities in high school.

Francis Keppel, former U. S. Commissioner of Education and currently with General Learning Corporation, spoke on "Education's Age of Flexibility." He assured the audience that

he would not disturb their digestions, and he did not.

The topic for the afternoon session was "Natural Language and Computers." Philip Stone gave instances of the computer as an analyzer of themes in textual material. He recounted some amusing dialogues between a computer and a young woman seeking counsel, and between a computer and a psychiatrist who was worried that machines might make his skills unnecessary. Carl Helm offered the view that natural language programming of large computers should provide the foundation for vastly expanded psychometric theory. In the final presentation, Ellis Page described the grading of essays by computer. In the present state of this art the computer appears to be about the equal of an experienced human. The three afternoon papers had the advantage of a common theme and a freshness of approach which closed the Conference on a happy note.

One cannot properly apply the same standards to a conference report as he would to a collection of articles devoted to one topic. A variety of topics and points of view is to be expected. Within this framework the 1966 Conference was a success. This reviewer, for one, looks forward to future meetings.

More Questions than Answers

George Strauss and Leonard R. Sayles

Personnel: The Human Problems of Management. 2nd Ed. Englewood Cliffs, N. J.: Prentice-Hall, 1960. Pp. xii + 756. \$9.75.

Reviewed by CLAUDE J. BARTLETT

The first author, George Strauss, is Professor of Business Administration, Associate Director of the Institute of

Industrial Relations, and Chairman of Organizational Behavior and Industrial Relations Subject Matter Field, School of Business Administration at the University of California, Berkeley. Leonard R. Sayles, the second author, is Professor of Business Administration, the Graduate School of Business, Ohio State University, and heads their Industrial Relations Division. They are also authors of *The Local Union and Organizational Behavior in Organizations*.

The reviewer, C. J. Bartlett, is Associate Professor of Psychology, University of Maryland, and chairman of the Graduate Training Program in Industrial Psychology. He is co-author with Benjamin Schneider of the research design winning the 1966 James McKeen Cattell Award, relating the study of individual differences to organizational climate.

THIS BOOK is a revision of a 1960 version by the same authors. The format and content are not changed markedly, but a large number of new references throughout indicate considerable updating in the revision.

This book is intended as a text for the business student, and is thus open to the usual criticism by psychologists. The tendency to generalize too broadly, to overemphasize human relations as an answer to all personnel problems, and to apply principles derived from past research and theory rather than concern for a research approach to problem solving, are all criticisms psychologists would be likely to make of books designed for business students. They apply to this book as well, yet not to the extent as to other such books. The authors have made a concerted effort to avoid these criticisms and often emphasize the limitations of their generalizations. They have attempted to present all approaches and urge an eclectic approach to the solution of personnel problems. The authors' efforts to represent all approaches leads one to the conclusion that the road to successful personal management is to "straddle the fence and keep both ears to the ground."

Their attempt at fence-straddling is not always successful. The influence of their mentor, Douglas McGregor, is

noted throughout the book, and social approaches receive considerable emphasis in relationship to other aspects of personnel management. Selection and performance evaluation play a minor role, with the primary emphasis on development, supervision, and motivation. The emphasis is continually on ways of jointly satisfying needs of the individual and the organization with individual differences in the background. For example "Management can do its job only through motivating people to work for management's objectives. But it is impossible to understand motivation without considering what people want and expect from their jobs" (p. 27). The rather weak defense of selection is concluded, "But we must not relegate all selection techniques to the dust bin just because they have serious limitations" (p. 485).

One of the highlights of the book is the presentation of case problems at the end of each chapter. The problems are well chosen to illustrate the content of the chapters and help to point out that solutions to real life situations are not simple. The solution of these problems require that the student consider careful evaluation of the principles and personnel techniques presented.

The final chapter is devoted to the raising of relevant questions concerning social responsibility of management practice. The discussion ranges from civil rights to management responsibility for individual worker satisfaction. The authors indicate a desire to raise more questions than answers about human personnel problems. In this they have been successful. The reviewer is of the opinion that the answers to these questions must lie in a research approach to problem solving. Unfortunately this book does not provide the background for answering questions in this way.



I love being superior to myself better than [to] my equals.

—COLERIDGE



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PSYCHIATRY: East and West

Edited by Jules H. Masserman, M.D.

*Professor and Co-Chairman of Psychiatry,
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This new work deals with a topic of intense current interest in many fields: psychiatric theory and practice in differing socio-cultural-political systems, particularly those under Communist regimes.

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BRFLY NTD

EUGENE J. BRUTTEN and DONALD J. SHOEMAKER. *The Modifications of Stuttering*. Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. xii + 148. \$5.50.

Stuttering is a strange old problem that no one has had very much success in solving. Because it is strange and old and a lot of people have tried their hand at solving it, the area of study has a voluminous folklore, conflicting data, half-theories, and mini-models. It is always nice, then, when someone enters the field and announces a new comprehensive theory of stuttering which rests on the solid ground of contemporary experimental data and boasts a clinically tested program of therapy. This is the case put forward by Brutten and Shoemaker in their *Modifications of Stuttering*. Unfortunately, they fail to live up to their own expectations. The theory is not new, but a slight variation of Wischner's concept which he propounded fifteen years ago with more clarity and greater sophistication. As for the "clinically tested program in therapy," it consists almost directly of applying Wolpe's techniques to stuttering in a rather unconvincing way.

Brevity is a virtue in most things, but the attempt to present a new theory of stuttering, relevant experimental data to the theory and a packaged therapy program in 120 pages of text is a most pretentious venture.

JOSEPH WEPMAN

RICHARD W. BUDD, ROBERT K. THORP, and LEWIS DONOHEW. *Content Analysis of Communications*. New York: Macmillan; London: Collier-Macmillan, 1967. Pp. x + 147.

This introductory book is more for the journalist than the psychologist.

Content analysis is defined and discussed in terms of journalism issues. Considerable emphasis is given, for example, to ways of measuring column length or measuring selectivity in editing of wire services. Occasionally journalism jargon is assumed.

Most psychologists have much more training in research design and statistics than assumed by this book, yet if a psychologist were to content-analyze newspapers or periodicals for the first time, the book offers a useful checklist of things he needs to consider.

PHILIP J. STONE

L. CHERTOK. With the assistance of M. BONNAUD, M. BORELLI, J. L. DONNET, C. REVAULT D'ALLONNES. Preface by P. WALTER. *Féminité et Maternité: Étude Clinique et Expérimentale sur l'Accouchement sans Douleur*. Paris: Desclée De Brouwer, 1966. Pp. 279.

This volume describes a rather unsophisticated study of the effects of a physical and psychological training plan, ASD (pregnancy without pain), on a group of women. The results are anything but conclusive.

DAVID ELKIND

HENRY V. DICKS. *Marital Tensions: Clinical Studies towards a Psychological Theory of Interaction*. New York: Basic Books, 1967. Pp. xiv + 354. \$10.00.

The author, a psychiatrist who for many years was the head of the Marital Research Unit at Tavistock Clinic, London, England, incorporates sixteen years of experience in his treatise on the understanding and treatment of disturbed marriages.

Clinical studies form the empirical foundation for the presentation of a

psychological theory of interaction. Drawing upon the psychoanalytic theories of Melanie Klein and Fairbairn, Dicks postulates a number of characteristic "positions" of conflict and ambivalence in the adult individual that can create tension when expressed in and through the marital relationship. The author also delineates the evolving social norms for marriage that are correlated with changes in the kinds of personal and interpersonal competence required for successful marital adjustment.

Dr. Dicks offers a consistent and coherent view of the personal dynamics and social environmental stresses that must be taken into account in diagnosing and treating a wide range of disturbed marriages. His knowledgeable, systematic approach to the subject matter deserves the serious attention of any clinician or social scientist whose work involves the understanding and/or treatment of marital conflict.

RALPH HEINE

EDWIN A. FLEISHMAN (Ed.) *Studies in Personnel and Industrial Psychology*. Rev. Ed. Homewood, Ill.: Dorsey, 1961, 1967. Pp. xiv + 821. \$8.50.

This book is an expanded revision of Fleishman's 1961 readings text. There are comprehensive samples of work in the traditional areas of personnel and industrial psychology, from selection to performance appraisal through fatigue to monotony.

HAROLD JACK LEAVITT

ALLAN FROMME. *Our Troubled Selves: A New and Positive Approach*. New York: Farrar, Straus & Giroux, 1967. Pp. 274. \$5.95.

One supposes that psychotherapists are, from time to time, frustrated by the awareness that their talents and training can directly benefit only a small number of patients in the course of a professional lifetime. Consequently, they seek to be of help to a larger audience by means of books designed to feed troubled individuals with the rich broth of their accumulated therapeutic wisdom.

This book, like many similar publications, endeavors to provide the intel-

ligent lay reader with a framework for exploring his current life and making constructive changes in thoughts, feelings, and behavior. Dr. Fromme's prescription calls for a retreat from over-intellectualization and for a greater investment in feeling and action. He offers concrete suggestions for implementing his program of self-help.

RALPH HEINE

GEORGE S. GOLDMAN and DANIEL SHAPIRO (Eds.) *Developments in Psychoanalysis at Columbia University*. New York: Hafner, 1966. Pp. xv + 357. \$12.50.

A collection of papers that celebrates the twentieth anniversary of the Columbia University Psychoanalytic Clinic for Training and Research. To the outsider this is an event that hardly merits a *Festschrift*; however, *chacun à son fete*. One hopes that it does not signal a trend, there being dozens of analytic institutes, hence hundreds of potential anniversaries, and thus an alarming number of self-congratulating collections to be Briefly Noted. As to the papers, they are in general of good quality, range widely in theme, and are less parochial than most psychoanalytic writings; but unfortunately they appear in a somewhat overpriced volume.

JOSEPH ADELSON

PETER W. HOLLIS (Ed.) *Comparative Theories of Social Change*. Ann Arbor, Michigan: Foundation for Research on Human Behavior, 1967. Pp. v + 374.

This volume presents a series of papers by eminent scholars from several different social science disciplines. The papers were given at a symposium sponsored by the Agency for International Development. It can be recommended as a handy collection of theoretical approaches to understanding social change. However, it contains more than its share of technical jargon and is, for the most part, dull reading.

MORTON DEUTSCH

EDMUND HUSSERL. Edited by MARTIN HEIDEGGER. Translated by JAMES S. CHURCHILL. Introduction by CALVIN



NEW BOOKS from GRUNE & STRATTON

THE USE OF INTERPRETATION IN TREATMENT Its Technique and Art

By Emanuel F. Hammer, Ph.D.

Diplomate, in Clinical Psychology of the American Board of Examiners in Professional Psychology

A broad-ranged appraisal of one of the more dramatic tools utilized by therapists—interpretation in treatment. It is readily noticed that the vast majority of therapists employ interpretations to varying degrees and in different styles; yet surprisingly little agreement has been reached with respect to their place, role, depth, timing, or art of interpretation. In this book, perspectives from a wide range of theoretical vantage points are focused on these central dimensions. The chapters include both the uses to which interpretations are put by the patient and the particular needs of the therapist in interpreting or not interpreting.

392 Pages, 2 illus., \$16.75

ROLES AND PARADIGMS IN PSYCHOTHERAPY

By Marie Coleman Nelson, *Editor*

Benjamin Nelson, Murray H. Sherman, Herbert S. Strean

The long awaited report on paradigmatic psychotherapy—a clinical approach especially developed to resolve emotional difficulties that respond unfavorably to interpretation and standard exploratory procedures of treatment.

Through a lucid description of paradigmatic techniques, richly illustrated with case material and annotated verbatim sessions, the theoretical foundations of the paradigmatic method are explored in depth and related to sources in psychoanalysis, role models and communication theory. Similarities and differences between paradigmatic techniques, resistance interpretation, siding with the resistance and the role-play of psychodrama are delineated. This volume provides the cornerstone for an emerging theory of treatment.

384 Pages, 3 illus., \$13.75

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O. SCHRAG. *The Phenomenology of Internal Time Consciousness*. Bloomington, Ind.: Indiana University Press, 1964. Pp. 188. \$6.50.

It used to be said, facetiously, that anyone who wished to understand Kant's *Kritik der reinen Vernunft* should first learn English and then read Max Muller's translation. Something similar might be said, in reverse, about the literature of phenomenology and existentialism. A translation, however precise, is not quite good enough. If you really wish to understand the contemporary phenomenological movement you must master the languages in which phenomenologists have expressed themselves. These are, primarily, German and French, but also Dutch. Language and thinking go hand in hand. English is a good language for everyday practicalities. English is wonderfully flexible when a new situation invites a new word, viz., "cool," "pot," "serendipity." And, with misgivings, I favor English as the least objectionable language for world communication. When we deal with subtle distinctions among ideas, however, English is lamentably weak; and this is especially true when we try to translate phenomenology into English. I am not disparaging Churchill's translation. He has done a noble job, and where English equivalents are not available he gives us the German original in parentheses. If you cannot read German, you should read Churchill's translation; but you really ought to read it in German.

Next to the *Logische Untersuchungen* (not yet available in English), this is probably Husserl's most important psychological contribution. Psychologists, particularly the Gestaltists, have done pretty well with the structures and the properties of space. Time, however, has eluded us. Since Vierordt (1868) there have been innumerable measurements of the reproduction of time intervals, and more recently there has been a growing interest in biological clocks. The consciousness of time, however, except for Bergson, has not been a challenging problem. Husserl reinstates it as a problem. Is there a "raw" experience of time? How is the experience of time related to present percepts, memories of

the past, and undated imagination? Husserl invites us to scrutinize the experience of time as experience. And this, one might say, is the essence of phenomenology.

ROBERT B. MACLEOD

MAX L. HUTT and ROBERT GWYN GIBBY. *The Mentally Retarded Child: Development, Education and Treatment*. 2nd Ed. Boston: Allyn & Bacon, 1965. Pp. xiv + 441. \$7.95 text, \$10.60 trade.

While the original Hutt and Gibby textbook was very useful in the field of mental retardation, the 1965 revision is considerably improved. The approach to problems of the retarded is based upon personality development and problems of adjustment to a greater extent than in most textbooks in the field of mental deficiency. The final chapter reflects the new emphasis on the continuum of services to the retarded being developed at the community level (where most of the cases are found). This text should be available to graduate students in special education as a resource book, and it is so written that undergraduate majors could also put it to maximum use.

JOHN R. PECK

C. R. JEFFERY. With a Foreword by HENRY H. FOSTER, JR. *Criminal Responsibility and Mental Disease*. Springfield, Ill.: Thomas, 1967. Pp. xvii + 324. \$11.00.

In a research project on the effect of the Durham Rule in the District of Columbia, lawyers and psychiatrists were interviewed on their experience and opinions with reference to the insanity plea in criminal cases. The results are tied together in an interesting but poorly edited melange of legal, psychological, and psychiatric information and theorizing. The author in his criticism of the Durham Rule is strongly influenced by Dr. Thomas Szasz's contention that the term 'mental disease' is not scientifically definable. Jeffrey's recommendation that experimental psychologists be called upon to testify in court on these issues seems impractical.

A. A. HARTMAN

PHILIP LIEBERMAN. *Intonation, Perception, and Language*. (M.I.T. Research Monograph No. 38) Cambridge, Mass.: M.I.T. Press, 1967. Pp. xii + 210. \$7.50.

Preceding a review in a final chapter of both classical and modern views of linguists on the mechanisms and the goals of intonation and stress, the author develops the concept of a normal, unmarked breath group that characterizes the intonation pattern of most brief declarative sentences and, indeed, of cry sequences in infants. The contour of this breath group shows a fall of vocal frequency at the end, though frequency may be either steady or gradually falling throughout its course depending upon the language or dialect. A marked breath group, with non-falling terminal frequency, is used by talkers to indicate doubt or incompleteness or interrogation. The author also considers a momentary prominence on stress as used by talkers that may be accompanied by changes in vocal frequency, intensity, and duration. The discussion is enriched by experimental data on the articulatory, acoustic, and perceptual correlates of these features.

IRA J. HIRSH

ALAN McLEAN (Ed.) (In cooperation with the National Association of Manufacturers and the Center for Occupational Mental Health, Cornell University Medical College) *To Work is Human: Mental Health and the Business Community*. New York: Macmillan, 1967. Pp. xiii + 306. \$6.95.

This is an uneven collection of papers by industrial psychiatrists, psychologists, businessmen, and union officials on mental health. Contributions vary from pleas for more, to descriptions of programs and institutions, to some brief passes at theory. Perhaps it represents a start toward building a professional field.

HAROLD JACK LEAVITT

CHRISTIAN MÜLLER. With the collaboration of L. CIOMPI, A. DELACHAUX, TH. RABINOWICZ, and J. L. VILLA. *Alterpsychiatrie*. Stuttgart: Georg Thieme Verlag, 1967. Pp. viii + 261. DM 45,—.

Written primarily for psychiatrists,

his volume successfully achieves its objectives of communicating and integrating current knowledge about social-psychological, psychiatric, and neurological concomitants of aging. More than 4,500 selected international references are cited and distilled. Increased life expectancy, socio-economic trends, and the particular psychological problems of the aged have fostered a subspecialty of gerontopsychiatry, which is as distinct from general psychiatry as is child psychiatry.

HENRY DAVID

ARTHUR NIEDERHOFFER. *Behind the Shield: The Police in Urban Society*. Garden City, N. Y.: Doubleday, 1967. Pp. vi + 253. \$5.95.

This is a sympathetic discussion of the police by a former policeman who is now a sociologist. He supports the principle of civilian review and control. The book includes a questionnaire study of police cynicism that displays the insights of an experienced policeman rather than the skills of a research sociologist.

MORTON DEUTSCH

GEORGES POLITZER. *Critique des Fondements de la Psychologie: la Psychologie: la Psychologie et la Psychoanalyse*. Paris: Presses Universitaires de France, 1967. Pp. xii + 262. F.9) + T.L.

This book is a reprint of a 1928 edition, and is anachronistic today since it is a critique of classical psychology from the standpoint of the "new psychoanalysis."

DAVID ELKIND

RALPH L. ROSNOW and EDWARD J. ROBINSON (Ed.) *Experiments in Persuasion*. New York and London: Academic Press, 1967. Pp. xix + 519. \$8.95.

An anthology of 30 photo-offset reprints from the extensive experimental literature on persuasion and opinion change. The selections are well-chosen to reflect the variety of theoretical perspectives from which persuasion effects may be viewed, and in 90-or-so pages of interstitial commentary, the editors manage to inform their readers



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Theoretical and Clinical Aspects of Psychoanalytic Therapy

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This book is intended for clinicians who work analytically—mainly through exploration, rather than suggestion—with young adults from their late teens to their early twenties. It is divided into a theoretic and a clinical part. The first, theoretic part consists of a presentation of both the metapsychologic and socioeconomic factors that characterize post adolescence. The clinical, second part of the book is the application of theory to practice.

144 Pages, \$6.50

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By John N. Rosen, M.D.

Each of the seven papers presented in this book is concerned with an aspect of direct psychoanalysis, or with an area of psychotherapy in general.

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PSYCHOANALYSIS DIRECT AND INDIRECT
DIRECT PSYCHOANALYSIS: A SUMMARY STATEMENT

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CLINICAL HYPNOTHERAPY

By David B. Cheek, M.D. and Leslie M. LeCron, B.A.

The purpose of this book is to offer a working concept of hypnosis as a valuable natural phenomenon in human ecology, to formulate simple plans of attack on clinical problems, and to discuss its applications and results with the combination of light hypnosis and the ideomotor questioning techniques developed by the authors.

This volume is essentially a course of instruction in hypnotic techniques in clinical application. The first part is a discussion of hypnosis itself, presenting the information the practitioner should know in order to utilize it. Part II deals with its clinical application in general practice and in many specialties. Significant case examples of various hypnotherapeutic methods are presented and discussed.

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about central issues currently under contention without taking an authoritative position. It is apparent from the breadth and timeliness of the scholarship in these connective passages that the editors know the relevant literature and are aware of its significance. The reprints themselves are embedded in a conventional organization: source, message, recipients, channel, and effects. Such key contributors as Festinger, Janis, and McGuire are well-represented, and the reader is exposed to at least one experimental report on such topics as recency versus primacy, attitude change via forced compliance, discrepancy magnitude, fear arousal and attempted reduction, "inoculation" and resistance to persuasion, "over-heard" counterpropaganda, and the role of distraction. This would be a very reasonable set of readings around which to organize an advanced undergraduate course in attitude change.

EDWARD E. JONES

THOMAS J. SCHEFF (Ed.) *Mental Illness and Social Processes*. New York: Harper & Row, 1967. Pp. xi + 330. \$3.95.

The editor of this volume has assembled some 20 papers, all previously published elsewhere, which, in one way or another, place the mentally ill patient in the context of the larger society in which he lives.

The four major subdivisions of the book treat the definitional problem (i.e., how one comes to be recognized as mentally ill), decision-making in the community regarding the mentally ill, the social-psychological aspects of treatment, and the implications of the medical-disease model of mental illness as contrasted with a social deviancy model.

The names of the contributors, of which Jerome Frank, Erving Goffman, R. D. Laing, and Thomas Szasz are a small sample, will be readily recognized by most mental health specialists. Like other similar collections of papers focusing on a particular issue within a broad field, this book offers convenient access to a set of significant papers which are widely distributed in a variety of professional journals.

RALPH HEINE

HIRSCH LAZAAR SILVERMAN (Compiled and Edited by) With Forewords by JOHN H. CALLAN, REBECCA LISWOOD, and DAVID R. MACE. *Marital Counseling: Psychology, Ideology, Science*. Springfield, Ill.: Thomas, 1967. Pp. xxxix + 530. \$18.75.

By the Editor's own admission, a minimal amount of structure was imposed upon this sprawling collection of essays on counseling marital partners. Since there are 36 contributors, not counting the authors of the three Forewords, identified with a wide variety of professions, institutions, and conditions of practice, it seems likely that the viewpoints on display are to a reasonable degree representative of the current status of the field. If so, then it is difficult to reach any conclusion other than that marital counseling, as a specialty, is still professionally and scientifically immature.

To be sure, there are papers by a few nationally recognized figures in psychology, psychiatry, social work and other disciplines on which the field of marital counseling has depended for its theory and technique. However, there is a substantial number of papers by dedicated but (seemingly) self-taught practitioners who are long on the mystique of love in marriage but short on rigor. Indeed, few of the papers even purport to offer much in the way of evidence beyond unsystematic generalizations distilled from an accumulation of practical experience.

The serious clinician who seeks to increase his knowledge of or competence in marital counseling will find something of value in this compilation. However, at the quoted price of \$18.75 he may wish to take a careful look before adding the book to his personal library. The volume cannot be regarded as the definitive, well-planned handbook, encyclopedia, or even comprehensive textbook of marriage counseling which might justify the cost.

RALPH HEINE

HANS ZULLIGER. *Praxis des Zulliger-Tafeln- und Diapositiv-Tests und ausgewählte Aufsätze*. (Practice of the Zulliger Card and Slide Tests and Selected Essays.) Berne and Stuttgart: Verlag Hans Huber, 1966, P. 226.

This is a companion volume to late Hans Zulliger's well-known *positiv-Z-Test* (1955) and *Zulliger-Tafeln-Test* (1962) texts. Consisting exclusively of case descriptions designed as a book of exercises for the student wishing to sharpen his skill in the use of the author's three-card-ink-blot technique. The materials presented cover a broad range of personality problems and characteristics, both normal and pathological. Zulliger's analyses clearly reflect his enormous experience and almost uncanny perspicacity in sizing up his clients. In fact, they are all but too rich in interesting detail and too perfectly congruous with whatever catamnestic data are appended to provide the novice with a realistic estimate of the test's potential in everyday practice, and to warn him against its uncritical use as an infallible, all-purpose diagnostic instrument.

FRED W. SCHMID

Children's Thoughts of Death

Marjorie Editha Mitchell

The Child's Attitude to Death. New York: Schocken Books, 1967. Pp. vi + 162. \$4.95.

Reviewed by EUGENIA H. WAECHTER

The author, Marjorie Editha Mitchell, is principal lecturer at a London School of Education and the mother of two children. She has had wide experience in teaching children and adults and in



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observing and stimulating their thought processes regarding conceptions of and attitudes to death.

The reviewer, Eugenia H. Waechter, is Lecturer, School of Nursing, University of California, San Francisco. She is currently engaged in research investigating death anxiety in children with fatal illness in partial fulfillment of requirements for the PhD in Child Development at Stanford University.

THE fact of physical death, of non-being, has deeply concerned humanity through the ages. In the twentieth century, despite an explosion of knowledge stretching from the secrets of the atom to the exploration of space, death seemingly continues to represent the ultimate mystery. Although in mid-Victorian times, death was acknowledged and intimately known, a decided change in cultural attitudes emerged in this century. Death became an avoided topic, and prudery shifted from disgust with the natural processes of reproduction to disgust with the corruption and decay of death. Reluctance to speak of death, especially with children was noted; their questions were generally circumvented and investigations as to attitudes toward death became taboo.

In the past decade, however, spurred by the tragic death of an international figure, a new inquiring attitude seems to be emerging. Articles and books about death, including children's attitude to death are appearing at an increasing rate. Investigations are now increasingly supported and pursued as to the child's conception of death, with variations induced by the rapid change in the political, sociological, and economic environment of children.

Although Marjorie Mitchell's book, *The Child's Attitude to Death*, is not based on a single piece of research and there is no attempt at quantitative definition, it is a valuable contribution to this growing field. She draws upon her broad experience as an educator with primary school children to bring together conclusions based on her personal observation and participation with children. Explanations are not based on a given school of psychology, although she does relate her work to that of

Piaget and others in the field of child development.

Certainly in a new field, work must of necessity be qualitative and somewhat philosophical, since it is at first necessary to identify the phenomena and questions to be studied. Posing useful questions must begin with behavioral observations of the children themselves. Also some things we wish to know about human behavior and attitudes do not lend themselves well to experimental study.

Mrs. Mitchell, in addition to observation and informal discussions with children over the years about their attitudes toward death, has utilized questionnaire studies, word association and sentence completion tests, and has examined normal healthy children's spontaneous verbal and art productions to discover their feelings about personal death, war, and killing. In addition, she draws heavily on the philosophical discussions and research of others in her formulations.

It is her contention that there remains in normal children an unresolved problem about death and a great deal of anxiety which has been neglected and cannot be solved by natural maturing. Her conviction is that twentieth century man must of necessity rethink the old philosophical questions regarding human function and bring death out into the open. The general purpose of the author therefore is to assist parents and educators who hold no definite religious beliefs, in this endeavor and in dealing constructively with the child's interest in death. Her comments are pertinent however, to all professional workers who deal directly with children in any capacity.

The background and general focus of the book is an examination of the changes in children's thinking about death since the pioneer studies of the 40's, and to discover how the children's attitudes have been influenced by a rapidly changing society which has experienced several major wars during this century. In analyzing the effects of the major sociological changes, Mrs. Mitchell attention to the various sources of the child's knowledge about death

and to the great changes in his social environment; the rise of science and decline of religion. She also attempts to show how ritual, myth and superstition still play a large part in determining attitudes.

THE GENERAL ARGUMENT and the of the book is that now, as previously, death is seen by children as a major deprivation related to the basic dread of separation or abandonment. Another theme is that in spite of, and perhaps even because of, two world wars in this century, life has become increasingly and infinitely more desirable than death. Improvements in the conditions of living and the decline in the death rate of the young influence the sense of remoteness of death but also increasingly modify its acceptability. She views as constructive the trend for scientific education to begin in the primary grades as a method of building more positive attitudes to death and to what the future may hold. By examining death scientifically, the natural curiosity of children might be used to overcome some of their repugnance through arousing and fostering their urges to explore the unknown.

A major objection to the book is that frequently statements and assertions given as facts are not documented sufficiently. It is therefore impossible always to evaluate statements brought forward as facts. In general however, the book is rich in references, both to personal experience and to research efforts and points up many areas where further research could be undertaken fruitfully.



There's no disputing that man likes creating and building roads. But why does he also like chaos and disorder even into his old age?

—DOSTOEVSKY



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Speech a Social Matter?

William Labov

The Social Stratification of English in New York City. Washington, D. C.: Center for Applied Linguistics, 1966. Pp. xii + 655.

Reviewed by COURTNEY B. CAZDEN

The author, William Labov, received his PhD from Columbia University in 1964. He remains at Columbia as Associate Professor in the Department of Linguistics. He writes about himself, "I utilize data from the speech community to attack problems of general linguistic theory, with particular emphasis on the regular structures which involve inherent variability (and of course, the variability inherent in linguistic change itself)."

Courtney B. Cazden, the reviewer, received a Radcliffe BA and an EdD from Harvard University under John Carroll and Roger Brown. She divides herself in time and in interests between education and research on children's language. She does this at Harvard's Graduate School of Education where she is Assistant Professor and at the Department of Social Relations where she is Research Associate.

As recently as 1965, there were only a few studies of social class variation in American English, despite the long-standing interest of psychologists and sociologists in behavioral correlates of social stratification, and despite the availability of techniques for studying what is perhaps the most socially determined of all behavior—the way we speak.

Now the situation has changed, for reasons partly extrinsic and partly intrinsic to the work itself. Because of the obvious relation between education in urban ghettos and our knowledge of the language of lower-class groups, federal

money has become available for such research, and information on social dialects is systematically being collected and distributed by a joint effort of the Center for Applied Linguistics and the National Council of Teachers of English. The present monograph, a reduced photographic copy of Labov's doctoral dissertation, is the first publication under that joint sponsorship.

But Labov's work represents more than a new direction dictated by demands for social action. More interestingly, it represents a shift in perspective and methodology within linguistics itself. Labov is primarily interested in language change and the factors influencing it. His goal is a "socially realistic linguistics"—a description of the structure of social and stylistic variation and an explanation of changes in that structure over time. The shift from the study of language as a homogeneous abstraction to the study of variability as an integral part of the linguistic system can be related to a corresponding contemporary shift in biological theory from typological to population models and concepts. To the typologist, differences among individuals are a kind of troublesome noise in the biological system. The populationist, on the contrary, regards diversity among individuals as the prime observable reality and the source of evolutionary possibilities (T. Dobzhansky, *American Psychologist*, 1967, pp. 41-48).

LABOV's data was obtained from interviews with 207 adults and children drawn from a larger survey of

the Lower East Side, supplemented with some ingenious ethnographic techniques. Independent variables were the informants' socio-economic class (SEC) and age (used to study change as psychologists substitute cross-sectional for longitudinal research), and five contextual styles elicited in a single interview: casual and careful speech, and reading a text, word lists, and minimal pairs. Dependent variables were quantitative measures of five phonological indexes. Labov also elicited reactions to the speech variables and compared each person's actual pronunciation with his subjective evaluations. The result is a most fascinating and significant picture of variation highly systematic on all dimensions.

Consider a few details of the distribution of the presence (r-1) or absence (r-0) of constricted pronunciation of final and pre-consonantal /r/. In *car* or *cards*, R-1 increases with formal styles in all classes. For any one style it increases from the lowest to the highest SEC with one important exception: the lower middle class groups cross over and use more r-1 in reading isolated words than does the upper middle class, a phenomenon Labov interprets as hypercorrection.

Age also interacts with social class to produce a complex pattern of linguistic change resulting from the interaction of r-1 as a prestige form in what had been an r-0 community as late as the 1930's. This pattern is identical at all points with that obtained in Labov's earlier study of the pronunciation of /r/ among salespeople at three New York department stores of high, middle, and low SEC: "When the interviewer [asked the salesperson], 'Excuse me, where are the women's shoes?' the answer would normally be, 'Fourth floor.' The interviewer then leaned forward and said, 'Excuse me?' He would then obtain another utterance, 'Fourth floor,' spoken in careful style under emphatic stress" (pp. 70-71).

There are methodological weaknesses in this otherwise ingenious technique, weaknesses which Labov discusses at length, such as written rather than taped transcription made by the person who had formulated the hypothesis being tested. But when the detailed analyses

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correspond, providing a replication for each other, one's admiration for elegant research only grows.

Of special interest to psychologists are the subjective evaluations of the phonological variables by the informants themselves. Regardless of their own speech patterns, 100% of the informants between 18-39 years recognized the r-1 pattern as socially preferred. Only 60% of those over 40 did so, presumably because they grew up when r-0 was the general pattern throughout New York City, while "young people below the age of 19 or 20 have not yet acquired full sensitivity to the socially significant dialect features of their community" (p. 421).

The social evaluation test measures conformity to values imposed by the community, what Labov calls "pressure from above." But many of the very people who deprecate r-0 use the stigmatized form in their own speech. Labov hypothesizes the presence of conflicting pressures from below: "... the need for self-identification with particular subgroups in the social complex. . . . We observe the process of increased differentiation of language behavior despite close contact of the social groups concerned, and their participation in a relatively uniform set of social norms" (p. 450).

In addition to their role in explaining linguistic change, the attitudes toward language which Labov reveals in this work, as in his previous studies, is of first importance for social psychology and education.



One learns more about a man from ten words which he speaks himself on his own behalf than from a ten-hour eulogy by a friend. It does not matter so much what he says in those ten words: what really counts is the way in which he says them.

—ROBERT GRAVES



Marketplace Actualization

Everett L. Shostrom

Man the Manipulator: The Inner Journey from Manipulation to Actualization. Nashville, Tenn.: Abingdon, 1967. Pp. 256. \$4.95.

Reviewed by ALVIN MAHRER

The author, Everett L. Shostrom, received his PhD from Stanford University in 1950 and taught at Pepperdine College until 1955. Since then he has moved increasingly into clinical practice. He is at present Director, Institute of Therapeutic Psychology, Santa Ana, California. This is his fourth book on counseling therapies.

The reviewer, Alvin R. Mahrer, received an Ohio State PhD in 1954, was director of the laboratory of psychopathology and director of psychological training at the Denver VA Hospital, while maintaining a private practice. Leaving Denver in 1967, he is now Professor and Director of the Clinical Psychology Program in Miami University's new doctoral program. He is editor-contributor of the recently published *The Goals of Psychotherapy and of the forthcoming New Approaches to Psychodiagnostic Systems*. With Leonard Pearson he is editor of the newly established *Division of Psychotherapy's* series on Creative Developments in Psychotherapy.

THIS is a short, readable, simply presented little book which undertakes an enormous task. It attempts to introduce into the popular marketplace the massive complex of ideas from the tradition of Binswanger, Fromm, Heidegger, Frankl, Tillich, Buber, Maslow, Rogers, Jourard, May, Goldstein, Bugental, Perls, and others. The task proves

too much for the spritely simplistic and uncomplicated tone and substance of the book.

The first strategy is to adopt a popular vocabulary. Abstruse generalizations are condensed into popular terms. Simple catch-phrases are coined. Heavy reliance is placed on the power of the everyday example. Once one selects to cast off the protection of research studies, philosophical esoterica, and the scholarly academic vocabulary, he is often forced to talk straight. The book selects to talk straight.

The second strategy is to extract a simple and understandable personality structure from the huge complex of personality conceptualizations. This task calls for the inventive organization of as yet unsystematized personality theories. Retaining the hallmark of simplicity, the author must be both spokesman and proponent, scholar and salesman, student and teacher, theoretician and huckster, a faithful reporter of the ideas of others and yet an organized packager of his own 'system.'

The third strategy is to paint a personality picture of the good, heroic, desirable optimal (actualizing) man, and to contrast this with the bad, villainous, undesirable (manipulating) man. Throughout history, each new conception of man seems to find it irresistible to redescribe "the tragic dilemma" of the ugly, shadow, base, corrupt, bad side of man and to apotheosize the good

side of man. It is time, once again, for man to submit to a description of his good and bad sides, now in existential-humanistic personality terminology. And so the book describes 'the' manipulator and 'the' actualizer.

The fourth strategy is to encourage and exhort people to move along the actualization journey, viz. ". . . to provide a new direction of living for those who see themselves herein." This fourth strategy occurs with deep philosophical conviction and a vigor approaching religious zeal. Existential humanism adds the necessary messianic spark to the colorless pessimistic amalgam of mental illness, morbid psychiatric disease entities, the medical model, and the hollow rally to 'prevent mental illness.'

SHOSTROM's personality model possesses two sides: the active, energetic, commanding authoritative "top dog," and the compliant, submissive "under dog." Each side may be expressed manipulatively or in a creative, actualizing fashion. With regard to the expression of the two sides, each person is endowed with the intrinsic freedom to choose for himself whether he is to adopt either the manipulative or the actualization mode.

The bipolarities in the personality structure may be related to each other in a complementary manner (in the actualizer), or in an antagonistic fashion (in the manipulator). Furthermore, there is a potential for congruence among unconscious, conscious, and communication processes. In addition to the twin notions of expression and congruence, Shostrom emphasizes the role of emotions as the means by which we make contact with others and with ourselves. Largely, these emotions include anger, fear, hurt, trust, and love.

Shostrom has assembled a package of personality conceptions which is digestible but grossly simplistic. It succeeds in providing a personality background for the description and understanding of the manipulator and the actualizer. The theory is neither intended to meet nor should it be evaluated in terms of the sober knife-edge criteria of the philosopher of science or the hard-thinking personality systematist.

The meat, of course, lies in the descriptions of the manipulator and the actualizer. The former exploits, uses and/or controls himself and others as things in self-defeating ways. He has lost his spontaneity, uses deception, is controlled and controlling, distrusts himself and others, and is unaware of the really important concerns in living.

The actualizer appreciates himself and others as persons rather than things, and has turned self-defeating manipulations into self-fulfilling potentials. Consistent with the theory, the actualizer trusts his feelings as well as trusting himself and others. He feels his feelings physiologically, communicates them accurately, and experiences them consciously. He communicates his needs, admits his desires, and honestly expresses his emotions. He is characterized by spontaneity; he responds and relates to himself and to others. These are the games manipulators and actualizers play.

Although Shostrom describes psychotherapy as the systematic route toward increasing actualization, the persistent theme is that mere descriptions of manipulating and actualizing ways of life suffice as guidelines to new directions in living. One doubts, however, if enthusiastic, inspirational exhortism is by any means either sufficient or significant.

Nearly a third of the book is devoted to everyday examples of manipulation and actualization. These examples should have been effective and telling, loaded with the concrete, specific, everyday, simple, homely manipulations and actualizations people display. But this section failed itself. Indeed, the instances almost degenerated into a collection of superficial and thin instances perilously dangling with only a thread of relation to the balance of the book. This, together with the strong tendency toward oversimplification, overinspirationalism, and overmoralization, constituted the major weaknesses.

Man, the Manipulator has little to offer the student, scholar or existentialist follower. On the other hand, it does creditably in the deceptively difficult task of introducing one experienced therapist's conception of existential self-actualizing psychotherapy into the popular marketplace.

High Voltage, Moderate Resistance, Low Power

Robert Rubenstein and Harold D. Lasswell. With an Introduction by Stephen Fleck

The Sharing of Power in a Psychiatric Hospital. New Haven and London: Yale University Press, 1966. Pp. xiv + 329. \$10.00.

Reviewed by LAWRENCE APPLEBY

The first author, Robert Rubenstein, is a psychoanalyst and Associate Clinical Professor of Psychiatry and Fellow, Ezra Stiles College, Yale University, and Co-Director of the Yale Psychiatric Institute. He is the author of a number of papers dealing with a variety of topics: hypnosis, suicide, psychosomatics. His co-author, Harold D. Lasswell, is Edward J. Phelps Professor of Law and Political Science at Yale University, and is a nationally-known authority on the psychology of public opinion. He is author of *National Security and Individual Freedom*, *Democracy Through Public Opinion*, *The Analysis of Political Behavior*, and *Power and Personality*.

The reviewer, Lawrence Appleby, is Coordinator, Psychology Service, Ypsilanti State Hospital and Assistant Professor of Psychology, University of Michigan. His 1956 PhD is from the University of Houston and for the past ten years he has been directly engaged in the study of mental hospitals and the initiation of new programs. His earlier research was involved with schizophrenia and more recently it has developed into a concern for specifying those attributes of hospital organization lending themselves to a "therapeutic milieu." He is editor, with Scher and Cumming, of *Chronic Schizophrenia: Explorations in Theory and Treatment*.

THE BOOK *The Sharing of Power*, addresses itself to issues beyond the humanizing of mental hospitals, reflecting the contemporary social scene in

a fundamental concern for human freedom and the right of man to frame his own destiny. The writers conceive of mental patients, akin to other underprivileged minorities, as "victims" and "losers" in the struggle for power.

The book represents an unusual union between psychiatry and political science. The common bond lies essentially with the authors' view of man "seeking to maximize (optimize) his values" and the psychiatric hospital, as a sociopolitical system, which contributes to their expression and development. Within this context, Rubenstein and Lasswell attempt to study the consequences of changes introduced at the Yale Psychiatric Institute after 1956, which were designed to increase patient participation in the decision process. They relate these developments to the historical background of the Institute and acknowledge them to be largely consistent with Maxwell Jones's work.

The study concentrates on a specific innovation, the introduction of patient-staff meetings, with the intent of testing the degree to which power-sharing actually occurred. The analysis, based on six sessions—two of them illustrated in the text—employs a methodology classifying the participants' statements according to their value content and their contribution to the decision process. The impact of these meetings on the hospital was further assessed by comparing the "post-innovation" roles of the patients, nurses, and psychiatric residents to those in the "pre-innovation" period.

Not too unexpectedly, the results revealed limited decision activity on the part of patients, the meetings resembling an "advisory council." Unfortunately, in their interpretations, Rubenstein and Lasswell did not refer to Rapoport (*Community as Doctor*), whose observations on the "Therapeutic Community" parallel their own findings. A more serious omission is that no data are offered concerning the patients' opinions or assessment of the experience. Singular importance was attributed to this meeting without consideration of its meaning for the patient nor its

integration into a total process preparing him for a greater power-sharing role in society. For instance, there is virtually no mention of what part family plays in the program.

The authors themselves eventually criticize the meetings for lacking clear-cut goals, definition, and structure. Furthermore, they point out that parts of the hospital organization were unable to cope with the newly developing democratic ideology, which suggests a "fragmentation" of the system. The fact that attendance at the meeting was required for patients but voluntary for staff would be a reflection of this duality. Attention to such structural problems in a psychiatric organization is already well documented in the field studies of Jules Henry, Caudill, and Belknap, among others.

Candid questions are raised by the writers about the "medical model," and alternate models of power-sharing are presented for possible research. At times, however, it seemed that an allegiance to psychoanalysis and to psychotherapy overshadowed some critical exploration. They conclude, for example, that despite the psychotherapeutic quality of the milieu, "the success or failure of treatment depends on what is achieved in the individual psychotherapeutic relationship."

The authors are obviously aware of the difficulty of integrating ideology and social practice, an issue not only peculiar to psychiatric institutions but germane to organizational theory in general (cf. Argyris). Their work has not brought new solutions but does offer, to the accruing literature on the mental hospital, a refreshing perspective and a research methodology deserving further inquiry. These contributions are somewhat offset by poor data presentation, looseness of design, and a markedly uneven style. It will probably appeal more to those concerned with action and change than to the rigorous researcher.



Motivation in Brief

David Birch and Joseph Veroff

Motivation: A Study of Action.
Belmont, Calif.: Brooks/Cole,
1966. Pp. ix + 98. \$1.50.

Reviewed by LOWELL H. STORMS

The first author, David Birch, received a 1952 PhD from the State University of Iowa. He has taught at Iowa State College and at the University of Iowa and is at present Professor of Psychology at the University of Michigan. The second author, Joseph Veroff, received a 1955 PhD at the University of Iowa and has stayed on there as Study Director in the Survey Research Center.

The reviewer, Lowell H. Storms, is Supervising Psychologist at the Neuropsychiatric Institute of the UCLA Medical Center. A PhD from Minnesota, his recent interests have been primarily concerned with schizophrenic behavioral disorganization, and with Bill Broen he is conducting NIMH supported research in that area. He has also been investigating psychological effects of brain dysfunction, and he maintains his interest in "general matters of learning," including behavior modification techniques with clinical problems.

THIS very short book has been intentionally written as a non-book. It is essentially meant to be a sort of transposable chapter in a beginning textbook in psychology consisting of the volumes in the Basic Concepts in Psychology series edited by Edward L. Walker of the University of Michigan.

The foreword to this series states that, "to a degree, an instructor of the beginning course in psychology can choose a particular set of chapters to meet the needs of his students." If the current volume is used as part of such a beginning text, it is the recommendation of this reviewer that the volume on learning in this series or other materials on learning be covered first. A number of references are made to the volume on learning by Edward L. Walker, and familiarity with certain learning concepts seems to be assumed

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or necessary for the understanding of some of the material presented.

Consistent with editorial policy, the authors of this volume present their own theoretical views as a "context for the study of motivation." This serves as a somewhat helpful framework for later discussion of experimental findings and various problems in motivation. The phenomena of motivation have to do with the choice, persistence, and vigor of activities. A distinction is made between instrumental and consummatory activities. Concepts of availability, expectancy, incentive, and motive are introduced to account for instrumental activity. Incentive, motive, and consummatory value are offered to account for consummatory activity.

As presented by the authors, the distinction between incentive and motive is more likely to confuse than enlighten. Consequences which an organism approaches or escapes are said to have incentive value for the organism. Strength of attraction or repulsion to a general class of incentives is called the motive for that class. It is further stated that, "A motive is a relatively stable disposition of the organism" (p. 28). Thus, motives are considered to be individual difference variables, while most within-subject variation in motivational states is covered by the concept of incentive. This leads to strange statements about the "negative incentive of fear of attainment" (p. 44) or "when two incentives—(1) to perform a sexual act and (2) not to perform it—are in conflict . . ." (p. 45) or that people "allow the incentive of aggression to be relatively unconflicted in wartime." It appears that the authors' desire to reserve the term "motive" for "relatively stable dispositions" such as the achievement motive, the power motive, and the independence motive leads to the use of "incentive" to designate a number of internal pushes toward action. This happens in spite of the fact that their definition of incentive in terms of the consequences of action seems to follow the more usual view that incentives are presented by the environment.

Nor are they entirely consistent in

their use of the terms in their theory. The "relatively stable" nature of motives seems to break down in the discussion of a study of the "hunger motive" (pp. 28, 29) in which two groups of subjects were differentially deprived of food.

THE discussion in this book is at times inadvertently unfair to other theorists and investigators. Hull's theory is discussed in terms of the $D \times H$ energizing function of drive, and deficiencies in this conception are noted without mentioning anywhere that Hull also discussed the functions of drive stimuli. In the section on affiliation, Harlow's experiment on the effects of raising monkeys with terrycloth or wire mothers is cited. The authors state that one could conclude from this study that physical contact is "the major component of affiliative incentives" (p. 65). This conclusion is then called into question without any reference to Harlow's other important work on affiliation in monkeys.

The writing in this volume is variable but generally disappointing. Too often sentences or whole paragraphs are unclear (e.g., the bottom paragraph on p. 68). Some statements are so vague as to seem meaningless. On p. 78, we find, "There is no direct one-to-one correspondence between the power motive and power behavior, indicating that power motive is a useful addition to predicting behavior that can be termed power behavior." Illustrative examples are often not well chosen and sometimes of doubtful relevance. On p. 50, the authors say, "If the person was seeking new information from the book for the sake of the information *per se*, then it is possible to think of curiosity behavior linked to the curiosity incentive."

Finally, much of this volume falls short of being interesting. Only the second of the three chapters struck this reviewer as interesting and informative enough to make a positive contribution to the education of students in beginning psychology courses. This is unfortunate, for the approach to motivation presented by the authors is original and, in some respects, promising.

An Experimental Psychology of Humans

Paul M. Fitts and Michael I. Posner

Human Performance. Belmont, Calif.: Brooks/Cole, 1967. Pp. x + 162. \$1.75; \$2.25.

Reviewed by WENDELL R. GARNER

At his untimely death in 1965, the first author, Paul Fitts, was Professor of Psychology and Director of the Human Performance Center at the University of Michigan. He had for years been one of the leaders in the study of human skills, and in the general area known as human engineering. The book was in the detailed planning stage at the time of his death. The second author, Michael I. Posner, 1962 PhD at Michigan and one of Fitts's students, agreed to finish the book. He is now Associate Professor of Psychology at the University of Oregon.

The reviewer, Wendell R. Garner, after 21 years at The Johns Hopkins University and an intervening year at the Applied Psychology Research Unit in Cambridge, England, has this year moved to Yale University as the James Rowland Angell Professor of Psychology. He is author of *Uncertainty and Structure as Psychological Concepts* and the 1964 recipient of the American Psychological Association's Distinguished Scientific Contribution Award.

THIS BOOK is another of the many small paperbacks which cover specialized topics in psychology, and which are intended to be used as texts in various combinations as desired by the instructor. The title of this one, *Human Performance*, is not a term ordinarily found in textbooks of psychology, so what is the specialty which this book covers?

A glance through the table of contents suggests that it covers practically all of what would otherwise be called human experimental psychology, ranging from motor and psychomotor skills, through motivation, perception, memory, learning, and even language behavior. The

senses get quite short shrift except for a very brief discussion of signal detection. The term "human performance" is one which Fitts was fond of using, and which is the same as the Center of which he was director at the time of his death.

If this book covers such a broad field as human experimental psychology, why this name? The answer lies not in the range of topics, but in a point of view toward them which has become distinctively different in recent years. Man is considered as a processor of information; thus he "performs" with respect to information, and it is this point of view which provides a distinctive topic for this book.

The book varies considerably in adequacy of coverage of the topic, being understandably strongest in those research areas represented most heavily at Michigan: reaction time and motor skills. The weakest chapter is that on language skills, and it is here that Posner (as the actual writer) elaborates his own excellent distinctions between tasks requiring information conservation, reduction, and creation. These distinctions, however, are much more general, and it seems as though Posner put them there to justify a full chapter, because there is very little other material there.

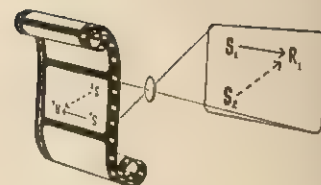
All in all, this will be a useful book in many intermediate level courses, including courses on perception and learning. It, in combination with other books, might become the basis for courses on information processing, or even human experimental psychology, an old subject seen in a new light.

Let us therefore above all assist ourselves by observing how many of the conscious states of our mind only develop and reach completion in an unconscious form.

—C. G. CARUS (1789–1869)



INSTRUCTIONAL MEDIA



Recent Films

Reviewed by R. E. GUILD and
KATHARINE I. BLICK

Since the last listing and descriptive annotation of new films in the January 1967 issue of CP, a number of new films of interest to psychologists have appeared. Some of the films briefly described here may be more fully reviewed in subsequent issues of CP.

Robert Guild, the former co-editor of *Instructional Media* (1965–1967) is Associate Professor at the University of Washington, where he is responsible for instructional media in the School of Dentistry. Katharine I. Blick, who collaborated in preparing these brief reviews, is just now getting her PhD in experimental psychology at the University of Washington, where she will continue as a post-doctoral fellow in physiology.

NOTE: The following three films are excerpts from the Lindemann lectures: A Survey of the Field of Social Psychiatry by Erich Lindemann, MD, produced by Harvard Medical School, Department of Psychiatry, at the Mental Health Training Film Program, Laboratory of Community Psychiatry. The lectures were given at the Visiting Faculty Seminar at the Harvard Club in Boston on April 21, 1965. All three films are available from Harvard Medical School, Mental Health Training Film Program, 33 Fenwood Road, Boston, Massachusetts 02115.

Some Beginnings of Social Psychiatry. 16 mm, sound, black and white, 14 minutes. Rental \$5; sale \$30.

This first excerpt represents the core of his initial remarks. Dr. Lindemann believes that social psychiatry combines the efforts of psychiatric clinicians and of experts in community processes. He points out its origin in medical anthropology, Gestalt psychology, and psychoanalysis of the historical and manipulative approaches leading to later concerns about crisis and social structure.

Group Studies and Social Psychiatry. 16 mm, sound, black and white, 22 minutes. Rental \$5; sale \$37.

Emphasizing the importance of the study of social systems, institutional and social structure, and the concept of role, Dr. Lindemann mentions a large variety of group studies which have contributed to the development of the field of social and community psychiatry, especially in relation to child rearing practices, personality development, and mental illness.

The Psychiatrist in the Community. 16 mm, sound, black and white, 22 minutes. Rental \$5; sale \$37.

Outlining a concept of the community, Dr. Lindemann describes the importance to the psychiatrist of understanding the structure and processes of a community as he extends his concerns beyond the patients who seek his care. The problems of access, gaining sanction, and learning the power structure, as well as defining his role and realizing his limitations, are crucial to the community psychiatrist. Dr. Lindemann relates some of his own experiences in order to illustrate the problems and the development of his

philosophy and research associated with predicaments and social change.

Intellectual Development of Babies.

Produced by RUTH FORMANEK and GRETA MORINE. 8 mm, continuous reel cartridges (nine sequences of approximately 3 to 4 minutes each), silent, 1965, color. The set of 9 cartridges with 30 manuals costs \$100. Available from Hofstra University, School of Education, Hempstead, New York 11550.

Shown at the 1966 International Congress of Psychology in Moscow and at the 1966 meeting of the Eastern Psychology Association. It is based on the observations and theories of Jean Piaget and deals with the interaction between the baby and objects in the environment, and with the early concepts the baby derives in this manner. Eight babies are pictured at different age levels so that their behavior can be compared and contrasted.

Referred for Underachievement: A Family Intake Interview. Filmed at Massachusetts General Hospital by Edward A. Mason, M.D. from the Laboratory of Community Psychiatry, Department of Psychiatry, Harvard Medical School. 16 mm, sound, black and white, 35 minutes, 1966. Available for rental for \$9 from Yeshiva University Film Library, 528 West 187th Street, New York, 10033; Sale, \$135. Distributed by the Center for Mass Communication, Columbia University Press, 1125 Amsterdam Avenue, New York, N. Y. 10025.

This is an actual intake interview, conducted by Dr. Norman Bernstein, and provides an example of an average working class family's response to one style of psychiatric interviewing. It can be useful for professional training and was produced specifically to serve as a stimulus to discussion of topics such as family diagnosis, the dynamics of a family interview, information to be

gained from family in contrast to individual interview, and the most efficient use of child psychiatry staff.

NOTE: The following four films are available for sale from Carousel Films, Inc., 1501 Broadway, New York, N. Y. 10036, Suite 1503. They can be obtained from rental libraries for \$10 to \$15 daily.

Sixteen in Webster Groves. Produced by CBS News. 16 mm, sound, black and white, 47 minutes, 1966. Sale, \$250.

Based on a survey of Webster Groves teen-agers by the National Opinion Research Center of the University of Chicago. It explores the attitudes of 16-year-olds growing up in an affluent suburban community, and it deals with their attitudes towards their parents, school, marriage and their futures—and towards adult standards.

Men in Cages. Produced by CBS News. 16 mm, sound, black and white, 52 minutes, 1966. Sale, \$275.

This film goes behind the bars of some of the worst penal institutions to interviews with the inmates. Special attention is paid to evaluating the adequacy of the rehabilitation programs.

The Farthest Frontier. Produced by CBS News. 16 mm, sound, black and white, 47 minutes, 1967. Sale, \$250.

This film reports on the revolutionary new "mind drugs." The IQ of a retarded child is brought to normal and a psychotic patient is returned to mental health. It also shows the effects of these drugs on memory and concentration and their ability to induce emotions.

The Detached Americans. Written by John Keats and narrated by CBS News Correspondent Harry Reasoner. 16 mm, sound, black and white, 33 minutes, 1965. Sale, \$145.

This film examines the widespread problem of apathy in this country. Some alarming examples of apathy are ex-

amined, as are some of the reasons for this direction in which many segments of our society are moving. It points to the breakdown in the closeness of family relationships as one possible contributing cause.

Odyssey of a Dropout. 16 mm, sound, black & white, 19 minutes, 1966. Produced by and available from Coronet Films, 65 E. South Water Street, Chicago, Ill. 60601. Can be rented from local libraries at varied prices; sale, \$105.

The editors of Instructional Media periodically receive requests for listings of films on selected topics in psychology. The film catalog described below may fill the need suggested by such requests.

Psychological Cinema Register Films in the Behavioral Sciences (plus periodic supplements). Distributed by Psychological Cinema Register, Audio-Visual Aid Library, The Pennsylvania State University, University Park, Pennsylvania.

The Psychological Cinema Register (PCR) is a nonprofit agency of The Pennsylvania State University. It locates instructional and documentary films in psychology and psychiatry, publicizes these films on an international basis, and makes them available throughout the world. The PCR catalog and supplements briefly describe approximately 1,000 16 mm films in the general area of psychology and psychiatry. The catalog includes films of considerable popular interest produced by polished, professional techniques and highly specialized films sometimes produced in a "somewhat amateur manner." All films listed may be rented and some may be purchased. This is unquestionably the best single listing of instructional films in psychology.



Values and Violence

Marvin E. Wolfgang and Franco Ferracuti

The Subculture of Violence. London: Tavistock, 1967. (Distributed in the United States by Barnes & Noble.) Pp. xxii + 387. \$11.50, cloth; \$5.95, paper.

Reviewed by HANS TOCH

The first author, Marvin E. Wolfgang, is Professor and Graduate Chairman, Department of Sociology, and Criminal Director, Center for Studies in Criminology and Criminal Law at the University of Pennsylvania. He is author of *Patterns in Criminal Homicide* and, with Sellin, *The Measure of Delinquency*. The second author, Franco Ferracuti, is Professor of Criminal Anthropology, University of Rome School of Law and Director, Criminology Program, Social Science Research Center, Puerto Rico. He is author of *Appunti de Psicologia Guidiziaria and Intelligence and Criminology: A Bibliography*.

The reviewer, Hans Toch, usually hangs his hat in the Psychology Department at Michigan State University, but this year he is visiting Professor on the same campus in the Department of Criminal Justice. His background is varied: for three years he was associated with the Office of Public Opinion Research at Princeton; he has done service with the U. S. Personnel Research Field Activity, San Diego; and he has been Visiting Professor at Harvard's Department of Social Relations. He is author of *The Social Psychology of Social Movements* and editor of *Legal and Criminal Psychology*.

THE BIBLE suggests that a successful act of genesis may legitimately end with an approving retrospective glance. The last sentence in Wolfgang and Ferracuti's book reads as follows: "We hope that our work might be considered useful as a bibliographical guide, as a

review of the current stage of criminological research and theory, as a clear statement of our thesis of a subculture of violence, as a comprehensive summary of criminological knowledge about homicidal and other assaultive behavior, and as an encouragement to the development of integrated scientific theory and research."

A ridiculous claim, surely, if one considers the number, variety, and complexity of the tasks that are listed. And yet, the amazing thing about this book is that it lives up to every one of its ambitions. Here is a superb criminological reference work, with a staggering list of citations covering work in sociology, psychology, biology, psychiatry, and anthropology, and including European, Asian, and Latin American as well as domestic sources.

The scholarship is painstaking. One chapter, for instance, is followed by a section of single-spaced footnotes exceeding the space covered by the text. Needless to say, the price a reader must pay for this kind of scholarship is that he cannot browse and be entertained. Often, portions of exposition are merely slightly rounded portions of annotated bibliography. But there are surprising bonuses: not only does the book cite every conceivable piece of writing on violence and homicide; not only does it offer an inventory of criminology as a science; it lapses into delightful bibliographic asides, such as reviews relating to psychophysics and values.

And in any event, the contribution of this book lies in its perspective,

rather than in its foundations. And here it is without peer, for no one else has as eloquently pleaded and documented the case for a unified, inter-disciplinary science of criminology. In part, the plea comes in the form of a demonstration: Wolfgang is a distinguished sociologist, and Ferracuti is a psychologist with groundings in medicine. Their writing is a truly joint effort, in which they have pooled their knowledge and fused their thinking. They show (among other things) that their basic thesis about violence, which has its origin in sociology, can easily accommodate contributions from psychology; in fact, several directions for such contributions are suggested in the book.

THE CONCEPT of *Subculture of Violence* is a simple and plausible one. It consists of the assertion that statistical concentrations of violence point to the existence of groups whose value systems recommend violence as a ready solution for a variety of problems—to a larger degree than would be true of their parent cultures. (It is assumed that such value systems can be gauged and scaled.) Violence-prone values would presumably be transmitted within these groups by means of processes familiar to students of learning (and to social and developmental psychologists). As a result of early influences, people would be produced for whom many situations would be violence-provoking (as ascertainable by the researcher in social perception), and in whom biological processes leading to violence would be frequently invoked (an area of study for physiological psychologists).

Wolfgang and Ferracuti treat their subculture of violence like a precious stone, which they expose to illumination from a variety of sources. Even where a body of writing is not very helpful, its review is meticulous. For example, all hypothetical biological determinants in the violence literature are exhaustively catalogued, even though what redundantly emerges is the fact that aggression only occurs in the presence of external stimuli. Psychiatric and psychoanalytic thinking is conscientiously examined, although it very obviously consists of "tautologies and unconfirmed

statements" which only become credible if one "steps into the syllogistic circle of the doctrinal position." In instances such as these, the task of scholarly buttressing could be achieved with less detail—and Wolfgang and Ferracuti step out of this role, and become bibliographers of violence.

The situation is different, however, with more germane reviews of work related to learning, cognition, and ecology. Interesting relationships are postulated by Wolfgang and Ferracuti between the subculture of violence and dissonance theory, frustration-aggression theory, and social-learning approaches. Among demographic studies, the most relevant to their thesis are those that link violence to young manhood. The statistical locus of aggression is important for a psychological as well as sociological understanding of violence, because it suggests a connection between *machismo* and violence-proneness. Unfortunately, direct confirmation of this relationship (such as could easily be obtained through phenomenological studies) is not available in the book, and this makes a potentially strong case excessively inferential. A related problem is that of insufficient differentiation: the reader who is ready to accept the subcultural explanation tends to wonder about the inter-connection between subculturally-based motivation and more situationally produced or more dynamically based needs in the same person; unfortunately, Wolfgang and Ferracuti are too busy with apologetics to advance to matters of exegesis such as these. To the extent to which their book deals with the subculture of violence, it would, therefore, perhaps have been better written a few years hence, when a fuller picture will be available.

BUT THEN, the main import of this volume, as one humble reviewer sees it, lies not in the elaboration of the subcultural thesis, but in the introduction of a new criminological discipline—and this effort is simply strengthened through the presentation of the sample model. In this sense, the book could probably have been more accurately labeled with its subtitle.

Under its general rubric, the book becomes a classic. It makes a powerful case for the scientific study of crime as an autonomous enterprise; it brilliantly traces the theoretical issues dividing criminologists today; it presents a convincing case against both disciplinary parochialism and quasiinterdisciplinary efforts of the "let-us-gather-all-conceivable-kinds-of-data" and the "let-us-hire-one-social-scientist-of-each-kind-and-call-ourselves-a-team" variety.

It is to the credit of this impressive work that it appears soundest at the core, and seems more vulnerable in its lapses of adventurousness, tentativeness, and extraneous speculation. In some instances, these forays involve unwarranted logical jumps, as when a psychophysical scaling method is presented as the obvious tool for future research, merely because one of the authors happens to have successfully employed it in a previous study. In other instances, it is far from clear why a given argument is presented at all; this reader, for instance, puzzled over the explicit advocacy of brighter street-illumination and of more sophisticated data processing for police departments.

A third category of dubious material may be somewhat inconsistent with the interdisciplinary character of the book: a section on the "conception and classification of values," for instance, seems of concern mainly to students of a Parsonian persuasion. Lastly, there is the realm of the controversial, which is best exemplified by the suggestion that subcultural influences must be neutralized by physically removing individual members from their reference group.

But even such frills do credit to the total effort, for they infuse it with life and currency. They dramatize the fact that this exciting book is not merely an act of stock-taking, but a significant paradigm, a firmly grounded pioneering step into an uncharted field.



Reader's Digest of Jones's Biography of Freud

Marthe Robert. Translated by Kenneth Morgan

The Psychoanalytic Revolution: Sigmund Freud's Life and Achievement. New York: Harcourt, Brace & World, 1966. Pp. 396. \$6.95.

Reviewed by WALTER TOMAN

The author, Marthe Robert, lives in Paris as a writer and author of television scripts. She is a scholar of German literature and studied at the Sorbonne. She has written biographies of Heinrich von Kleist and Franz Kafka.

The reviewer, Walter Toman, is professor of Psychology at the University of Erlangen-Nurnberg and Senior Research Associate, Brandeis University. He trained in psychology, psychotherapy, and psychoanalysis, and is interested in the improvement of clinical research, harder data, tighter operational definitions, and more explicit and logical hypotheses, theorems, and models. He is author of *Psychoanalytic Theory of Motivation and Family Constellation*.

TAKE Ernest Jones's account of the ambitious, sensitive, contemplative and imaginative man with a great gift for words, Sigmund Freud, who made it to greatness and fame and on whom Jones had early wagered mind and money; cut out some over-scholarly and too meticulous portions and a few others that would not stand a *Reader's Digest* reader's test; add "feminine warmth" and some sort of maternal pride; add a few interpretations here and there, not always well substantiated, but not incompetent either; and you have Marthe Robert's book.

It is a somewhat arbitrary history of Freud's life and work. The chapters carry journalistic labels such as "Dreams and Reality," "Freud and Science," "The Birth of the Movement," "The Psychopathology of Everyday Life" etc.,

or toward the end, "Eros and Death," "New Crises," "Fame," "Moses and Exile." They are written with empathy and an adequate familiarity—based in large part on Jones's biography—with Vienna at the time of Freud, with his contemporaries, with his own intellectual development, with his personal concerns and problems.

It tells the educated layman how Freud, coming from a middle-class family that eventually moved to Vienna while failing to mention Freud's father's first set of children with another wife—became a physician and neuropathologist, visited Paris for six months, married Martha Bernays and set up practice, because a scientific career, at that time, required means of one's own. Marthe Robert suggests that being his mother's favorite gave him great confidence in later life, and having a careless and unsuccessful small businessman for a father left him preoccupied with male authority figures. Physiologist Brücke, psychiatrist Charcot of the Salpêtrière in Paris, physician Breuer and nose- and throat-specialist Fliess, all elicited in him an attitude of "manly devotion." Author Robert comments: "Freud always had to have a man close to him whom he could admire."

Somewhat later in his life he also began to look for defenders of, and successors to, his works and picked Jung, but also Adler, Stekel, Rank and Ferenczi, only in order to find himself "betrayed" by them after various lengths of time. Abraham and Jones had warned him about some of them.

As to the Psychoanalytic Revolution, Marthe Robert hints at Freud's refutation of his own "trauma hypothesis" about the cause of neurosis, at the secret of the Greek tragedy Oedipus Rex that he laid bare and discovered again in Shakespeare's *Hamlet*, and at his work on dreams. They are not "useless, unhealthy or morbid or rubbishy products of psychic activity . . . There is no better way of understanding Freudian dream analysis," Robert continues, "than to follow step by step the extraordinary inner prospecting Freud invites his readers to share by recounting his own dreams." She goes on hinting at the theory of

sexuality. Freud's intention (in "Three Essays on Sexuality") was not "to define sexuality, but to show, by the study of perversions and neuroses, that the usual definition covers the reality only if the innumerable aberrant cases are ignored." But "no other book of his brought down on him so much stupid abuse and hatred." All of this readers may be likely to consider rather old hat.

Freud lived in an atmosphere of tragedy. Friends and fellow psychoanalysts died or committed suicide. His family had escaped World War I unscathed, but poor. His daughter Sophie passed away in Hamburg and one of her children who had been brought to Vienna and to whom Freud had taken a great liking died when only a few years old. Finally he himself underwent his first of a long series of operations to prevent cancer of the mouth from spreading. Coincident with some of these sufferings was his new thinking on Eros and the death instinct, the author recommends. Old hat again?

Asking ourselves what, in the eyes of Marthe Robert, constitutes the psychoanalytic revolution, we cannot be too sure about the answer. Is it the descriptive effort of uncovering unconscious forces in human behavior and experience as exercised by writers and practitioners, or by one of those, or by writing practitioners? Is it the emphasis on feelings, or on the new technique of exploring the mind? Is it the international organization of psychoanalysts, or the biennial rosters of its members? Is it that, as a consequence of a revolution, everybody nowadays has heard of Ego and Id, of Sex and Aggression, of sensuous mother- and father-love? Is it that a sense of creativity has been offered even to the simple person without talents, because now he knows he can dream and, for a fee, make a psychiatrist listen to his troubles?

A nice, pleasantly and interestingly written, but essentially trivial book.

A Happy Continuity and Some Change

Leona E. Tyler

The Psychology of Human Differences. 3rd. Ed. New York: Appleton-Century-Crofts, 1965. Pp. viii + 572. \$6.75.

Reviewed by J. M. STEPHENS

The author, Leona E. Tyler, has spent many years at the University of Oregon and in 1965 became Dean of the Graduate School there. In addition to earlier editions of the book reviewed, she has written The Work of the Counselor, Developmental Psychology (with Florence Goodenough) and Clinical Psychology (with Norman Sundberg).

The reviewer, J. M. Stephens, has been associated chiefly with The Johns Hopkins University, retiring from there in 1965. He has been visiting professor at the University of California (Berkeley) and at the University of British Columbia. His publications include Educational Psychology, The Psychology of Classroom Learning, and, most recently, The Process of Schooling.

THIS REVIEW can make no pretence of impartiality or openmindedness. We are all in debt to Professor Tyler's earlier editions of this classic, and my own indebtedness, a matter of public record, is especially heavy. I have regarded the earlier editions (1947 and 1956) as models in the art of textbook writing.

We must inevitably wonder how this book compares with these earlier editions. Are there any new major categories or topics that strike the author as being important in the field of human differences? What has been done about the detailed contributions that have accumulated during the last decade? Have they been included? And, if so, how have they affected the summing up?

The topics treated are much like those of the 1956 edition. There are minor changes in some of the chapter titles, but there is not always a cor-

responding change in the materials within the chapter. As the historical tradition would demand, there is much emphasis on differences in intelligence, and, as the breadth of the concept would demand, there is a detailed treatment of differences in personality. There is also a chapter on perceptual differences, relabeled differences in cognitive style. To supplement the general discussion of these broad and generic topics, certain aspects are selected for detailed treatment. And in this selection one might detect Professor Tyler's special interests in the problems of the counselor. Over and above the basic chapter on intelligence, for instance, we have separate chapters on school achievement, on special abilities and talents, on mental retardation, and on the gifted child. Supplementing the generic chapter on personality we have a special chapter on interests and values—formerly interests and attitudes. There are no separate chapters on psychomotor performance, social traits, mental health, or character. These topics receive some mention, of course, in the more generic treatments. To some extent, moreover, they are worked into other sections.

There is little, if any, change in the categories or kinds of group differences considered important (sex, age, race, social class), nor in the basic relations or dynamics that are emphasized (mind-body, heredity, environment).

The specific investigations of the period 1954-64 are well represented. About one-third of all the publications cited are within this period. The more conspicuous innovations of the decade are clearly noted. Guilford is duly depicted, as are the important results from PROJECT TALENT, and the National Merit Scholarship Program. In the section on personality, Eysenck is brought up to date, and Cattell almost. There is due note of the work of Super, Kluckhohn, and Brewster Smith in the field of values, and the recent work of Witkin almost dominates the treatment of cognitive style.

There are, of course, inevitable omissions. In the sensitive area of race differences, for instance, we miss the work of A. R. Jensen and of Iscoe and Semmler. Apparently Pettigrew's book

on the Negro in America appeared too late for inclusion.

WHAT has been the impact of the new materials included? In the over-all appraisal they have had a marked and sobering effect. The last chapter abandons any hope of large-scale truths, and foresees a multiplicity of specifics. We must be content with "limited contingent conclusions about specified populations in particular situations." In the treatment of growth, the particularist slant is even more pronounced and we are pushed to the very brink of the chaotic view that each and every observation must be law unto itself. Not only is it difficult to form a generalization that applies to several individuals, but a statement made about a single individual, as he appears at one time, may have little validity at a later date. The new data also call for a change in basic concepts. Dimensions seem less adequate than strategies (leveling or sharpening). Moderator variables must be increasingly invoked.

But it is in the broad summing up that the new studies have their chief influence. They have had much less effect on the more detailed, chapter-by-chapter treatment. Here the earlier, unchanged statements predominate. One wonders, as a matter of fact, if there may be an implied tribute, perhaps to the steady state of our discipline, perhaps to the early shrewdness or prescience of the author, in the fact that the innovations make so little difference. At any rate, the 1956 description runs evenly along; the new study appears, and, as we come to the end of the section, the earlier prose closes smoothly around with hardly a ripple to mark the intrusion.

With respect to presentation, the outstanding virtues of the earlier editions certainly remain. The treatment of the chosen topics is surprisingly complete. Again we appreciate the remarkable clarity both in organization and in language. The interpretations are still fair, balanced, shrewd, and straight-forward. There is no hint of one isolated digest following the other into some mechanical print out. Instead we get the picture of a single intelligence presenting

a complex array of data, and directing our attention, in clear and forceful language, to the important issues involved.

Hearty Fare for Average Readers

Robert Borger and A. E. M. Seaborne

The Psychology of Learning. Baltimore: Penguin, 1966. Pp. 200. \$1.25.

Reviewed by WINFRED F. HILL

The authors, Robert Borger and A. M. Seaborne, are Lecturers in Psychology at Brunel University. Borger trained as a mathematician and Seaborne as an electrical engineer before going into psychology. Their degrees are from Oxford and University College, London, respectively.

The reviewer, Winfred F. Hill, is Associate Professor of Psychology, Northwestern University. His 1954 PhD is from Stanford. He spent two years in the Army at Walter Reed Hospital and one as an instructor at Harvard. His interests are in animal learning, learning theory, and applications to personality.

IN his editorial foreword, C. A. Mace gives the purpose of this book as "restating the facts and the theories in language understandable by students of psychology, by teachers, and by 'ordinary' readers." The field for which the authors have attempted this clarification includes not only the traditional psychology of learning but also the developmental, perceptual, clinical, and educational aspects of learning. To accomplish this goal in 228 small pages of text (plus 10 photographs) is a challenging undertaking. Borger and Seaborne have met the challenge.

To achieve such breadth in so small a space, something must obviously be sacrificed, and what the authors have chosen to sacrifice is detailed considera-

tion of specific research literature. Only very few studies are considered in enough detail to give the reader any clear idea of the design and procedure. With these few exceptions (which impressed this American reader as biased, understandably, toward British sources) the treatment is limited to problems, theories, and generalizations about research findings.

Granted this limitation, the book does an excellent job of indicating what the psychology of learning is all about, both as a topic in pure science and as a basis for applications. It assumes no prior background in psychology, but quickly involves the reader in questions of content to the research psychologist. Such issues as the physiological basis of reinforcement, the extent to which complex skills can be regarded as chains of S-R connections, the relation between extinction and forgetting, and the use of analogy in theory construction are given serious and balanced consideration. Along with these traditional learning topics, there are comparable appraisals of such related issues as the roles of nature and nurture in perceptual development, the efficacy of psychotherapy, and the relative merits of different forms of programmed instruction. The book thus achieves much of the breadth of an introductory psychology text while maintaining its unifying emphasis on learning.

Though the discussion of the major theories of learning is brief, it includes both evaluative comments and some exploration of the relations among the theories. Here again, the treatment is a balanced one. Skinner, for example, is lauded enthusiastically for his techniques of behavioral control, but his interpretation of language acquisition is pointedly rejected. The one striking omission among currently active learning theories is the whole group of statistical models. Perhaps this omission reflects the authors' conviction that, although abstract and technical topics are a proper part of their subject matter, they must be discussed only in terms (presumably not mathematical ones) "understandable by . . . 'ordinary' readers." In any case, this book demonstrates how effectively that goal can be achieved.

ON THE OTHER HAND



In this Department CP invites discussion of reviews and of books reviewed. Here is the place for that kind of intellectual dissent that promotes progress in understanding. Let your criticism be ad verbum, not ad hominem. Seldom does a criticism merit more than half the space of the text criticized—never more than equal space and then only when the letter is interesting and well written. CP edits letters when it thinks they should be. Single-spaced letters will be returned for double-spacing. Please send carbons.

DISTORTED DREAMS?

The review by Lawrence Monroe (CP, Dec. 1967, 12, 607) of our book *The Content Analysis of Dreams* contains so many inaccuracies and misleading criticisms that an extremely distorted view of the purpose and content of the book was given to readers of CP.

1. Monroe writes, "Surprisingly, however, the authors chose artificially to limit their approach to the analysis of manifest content exclusively, rather than to treat both the manifest dreams, thoughts and the free associations or latent material as verbal behavior, equally susceptible to content analysis." We discussed the question of "manifest" versus "latent" content on pp. 19-20, and said that free associations could be content analyzed. In fact, Hall did that in a recent article (*J. Personality*, 1963, 31, 336-345). Moreover, there is nothing artificial about limiting one's research to the reported dream and many investigators are doing just that.

2. Monroe criticizes the book because it "fails to make a theoretical contribution to

the field of sleep and dream research; it does not review previous dream theory or research, nor does it offer any new theory." Nowhere in the book did we make the slightest pretense of offering any new dream theory, or of claiming that we had reviewed previous dream theory. We said in the preface that the main contribution of the book is a methodological one. Rather than faulting us for not offering a new theory, Monroe should have evaluated our success in achieving the limited goal we set, that of delineating problems in applying content analysis to dreams.

We are baffled by Monroe's claim in the above statement that we did not review previous dream research since the 46 pages of Chapter 15 are devoted to previous quantitative studies of dream content.

3. Monroe's next sentence reads, "In fact, they completely overlook the large body of empirical dream research produced since the discovery of objective indices of REM (Rapid Eye Movement) sleep and its psychological counterpart, dreaming." We did not discuss this research in detail because it was not relevant to the aims of the book. We took note of it, however, on pp. 22-23, 25-26, 31, and 225, as Monroe could have seen had he looked at the index. We said, "Now that dreams have entered the laboratory in such a dramatic and unexpected manner, new ways of treating them are required which are just as objective as the indicators of dreaming themselves" (p. x).

4. Monroe objects that "there is no theoretical or empirical justification for the inclusion of their particular scales." A good part of Chapter 3 is devoted to such a justification. On p. 29 we listed the considerations that guided our formulation of classes of items. On p. 30 we indicated our rationale for including the theoretical scales, and on pp. 126 and 140 we described the published studies that have been done with two of the theoretical scales.

5. Monroe also is critical because "They failed to emphasize additional restrictions that should have been made very explicit" in preparing our dream norms. However, all the additional restrictions Monroe mentioned were explicitly described on p. 158 of the Norms chapter. On p. 32 the normative procedure was also described and its limitations strongly (surely not "timidly," as Monroe complains) emphasized.

Monroe concludes that "their norms appear to have very little utility for present and future dream research . . ." without giving even a shred of evidence or justification for this broad indictment.

Limitations of space prevent us from taking up other criticisms made by Monroe, but the ones mentioned here should indicate how misleading the review was.

CALVIN S. HALL

University of California, Santa Cruz

ROBERT L. VAN DE CASTLE

University of Virginia

A letter was received from Dr. Campbell Perry (Unit for Experimental Psychiatry, Pennsylvania Hospital) which we decided not to print here because of its close agreement with the major points contained in the Hall and Van de Castle letter.

Ebs.

WEICK RETORTS

If Professor Toch's "Court of Appeals for Conflicting Review" were to materialize, I presume that the docket would be monopolized by misinterpreted reviewers rather than misinterpreted authors, and that condemnation of anyone to a lifetime of anything would not occur because everyone would be acquitted by "hung juries."

"CP's Reviewer"

KARL E. WEICK
University of Minnesota

MANY THANKS

Albert H. Yee's review of my *Contemporary Educational Psychology: Selected Essays*, "Empiricism without Data"? (CP, Jan. 1968, 13, 22) is the kind of negative review an editor must cherish. It discourages just the readers who could not be encouraged to follow the book's examples. It focuses its critique on the book's title, and devotes two-thirds of its lines to quotation of the book's substance. And it makes advertisement of what I could hardly have been the first to say: "None of the reprinted articles were originally published

in leading journals for educational psychologists, such as the *Journal of Educational Psychology* and *American Educational Research Journal*. None of the articles refer to empirical sources, such as in Gage's *Handbook of Research on Teaching* or the *Review of Educational Research*.

No author had work reviewed in Anderson's chapter on "Educational Psychology" in the 1967 *Annual Review of Psychology*."

Correct, correct, correct.

RICHARD M. JONES
University of California,
Santa Cruz



Helmholtz—the physiologist who learned physics for the sake of his physiology, and

mathematics for the sake of his physics, is now in the first rank of all three.

—W. K. CLIFFORD



Recent Slavic Books in Psychology

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Lehigh University

with the assistance of

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This list covers publications in Slavic languages other than those of the USSR. The publications in Russian and Ukrainian will be listed separately.

Czech

BOUCHAL, M. and R. KONEČNÝ. *Psychologie v lékařství* (Psychology in Medicine). Praha: Státní zdravotnické nakladatelství, 1966. Pp. 231.

BRICHČIN, M. *Teoretické a metodologické problémy výzkumu průběhu volních pohybů* (Theory and methodology of research on the timing of voluntary movements). Praha: Universita Karlova, 1966. Pp. 170. (Table of contents and summary in English and Russian.)

DOSTÁLEK, C. *Rückläufige bedingte Verbindungen* (Backward conditioning). Praha: Academia-Berlin: VEB, 1964. Pp. 119.

HOSKOVEC, J. *Psychologie hypnózy a sugesce* (The psychology of hypnosis and suggestion). Praha: Academia, 1967. Pp. 112. (Extensive bibliography; summary in English.)

HRBEK, J. (Ed.) *The higher nervous activity*. Vol. VI. Prague: Státní pedag-

ogické nakladatelství, 1966. Pp. 376. (Primarily in English, with an occasional contribution in German. Summaries in Russian and Czech.)

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JIRÁNEK, F., Z. HOLUBÁŘ and B. LOMOVÁ. *Otázky psychologie učení* (Some issues of educational psychology: Development of the comprehension of relationships). Praha: Státní pedagogické nakladatelství, 1966. Pp. 139.

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- nické nakladatelství, 1966. Pp. 150. (Summaries in Russian and English enclosed.)
- KULIČ, V. (Ed.). *Programované učení jako sloboý problém* (Some international contributions to programmed learning). Praha: Státní pedagogické nakladatelství, 1966. Pp. 201. (Articles translated from English, Russian and German.)
- LANGOVÁ, J. and M. MORÁVEK. *An experimental study of stuttering and cluttering*. Praha: Academia, 1966. Pp. 99. (In English.)
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Social Psychology Textbooks Great Diversity in Content and Aims

Richard Dewey and W. J. Humber

An Introduction to Social Psychology. New York: Macmillan, 1966. Pp. xiii + 674. \$7.95.

John T. Doby

Introduction to Social Psychology. New York: Appleton-Century-Crofts, 1966. Pp. xiv + 407. \$5.75.

Edwin P. Hollander

Principles and Methods of Social Psychology. London: Oxford University Press, 1967. Pp. xxiii + 520.

Edward E. Jones and Harold B. Gerard

Foundations of Social Psychology. New York: Wiley, 1967. Pp. vii + 743. \$8.95.

S. Stansfeld Sargent and Robert C. Williamson

Social Psychology. 3rd Ed. New York: Ronald, 1966. Pp. x + 733. \$8.50.

Goodwin Watson

Social Psychology: Issues and Insights. Philadelphia: Lippincott, 1966. Pp. x + 630. \$6.95.

Reviewed by SAMUEL S. KOMORITA

Richard Dewey, first author of the first book listed above, is Professor and Chairman of the Department of Sociology at the University of New Hampshire. W. J. Humber is a partner in a firm of consulting psychologists (Humber, Mundie, and McClary). John T. Doby, author of the second book, is Professor and Chairman of the Department of Sociology, Emory University. Edwin P. Hollander is Professor of Psychology and Director of the Graduate Program in Social Psychology at the State University of New York at Buffalo. Edward E. Jones is Professor of Psychology at Duke University, but spent the year 1967-68

as Visiting Professor at the University of Texas. His co-author, Harold B. Gerard, is Professor of Psychology at the University of California, Riverside. S. Stansfeld Sargent is a clinical psychologist at the VA Hospital in Phoenix while his co-author, Robert C. Williamson, is Professor of Sociology and Chairman of the Department of Social Relations at Lehigh University. Goodwin Watson is Professor Emeritus of Social Psychology and Education at Columbia University and also Distinguished Professor and Director of Applied Behavioral Sciences at Newark State College.

Samuel S. Komorita (PhD, Michigan,

1957) the reviewer, after spending some time at the RAND Corporation and at Vanderbilt University, has been at Wayne State University since 1961. He is now Professor of Psychology and Chairman of the Doctoral Program in Social Psychology. His publications have been primarily in the areas of attitude theory and measurement and in decision-making and bargaining based on game theory. He is co-author with McKeachie of *A Review Outline of Psychology*.

JUDGING from the topics covered in the six books under review, the field of social psychology is extremely broad, complex, and impossible to cover ade-

quately in a one semester course. Faced with this problem, two strategies are available in writing a textbook for the introductory course: survey the field superficially or sacrifice breadth for depth of coverage in selected areas. Books reflecting both strategies are obviously needed, but unfortunately, not many writers have published texts using the second strategy. One reason for this is that when an author decides to cover each topic in depth, often he feels that it is necessary to organize systematically the basic concepts and ideas within each chapter and to integrate this material from chapter to chapter. This is not an easy task even when the domain of social psychology has been restricted.

One of the books under review, the book by Jones and Gerard, clearly follows the second strategy. Unlike the others, it does not attempt to survey the broad field of social psychology but presents a systematic, experimentally oriented approach. In some respects it is an extension and refinement of the social psychology book published in 1959 by Thibaut and Kelley; however it is broader in scope, is not restricted to exchange theory as the main basis for social interaction, and more important, it is up-to-date.

This book is truly systematic, integrated, and well written. Important concepts and principles have not been inserted here and there but have been woven into the main fabric of each chapter. The early chapters on the socialization process, for example, include an excellent discussion of the motivational bases underlying social interaction. The authors make a distinction between effect dependence and information dependence (dependence upon others for direct mediation of outcomes and for information about the environment). These two types of dependence are related in subsequent chapters to other basic processes. The authors, therefore, have attempted to integrate various concepts and ideas not only within each chapter but between chapters as well.

Paradoxically, however, this integration may be one of the main limitations of the book in that it will be difficult for a teacher to delete certain chapters according to his personal biases since

some of the later material is hard to follow without full understanding of earlier discussion. This is an important consideration since the book is long (743 pages) and in a one-semester course some of the chapters in the text may have to be deleted if one wishes to assign additional reading.

Not only is the book systematically organized and well written, it is also conceptually innovative. In a number of places, the authors present an original paradigm or model for interpreting data or a set of related concepts. Their syllogistic model relating attitudes, beliefs, and values, for example, though not completely original, provides a provocative way of interpreting the structure of attitudes. The authors subsequently attempt to show the relationship between their syllogistic model and Heider's balance theory, Abelson and Rosenberg's symbolic psychologic, and Osgood and Tannenbaum's congruity principle.

ONE of the basic and perhaps the most important theoretical and integrative concept postulated by the authors is the idea of "unequivocal behavior orientation," (UBO). The authors state that, "There is considerable uncertainty involved in predicting outcomes and the individual tries to reduce this uncertainty by information-seeking and to deny it by moving toward an *unequivocal behavior orientation*. Such an orientation represents a commitment to action in the face of uncertainty" (p. 185). Three basic assumptions are implied about UBO: (1) it is functional in that it reduces uncertainty and facilitates the decision-making process; (2) it serves as a basis for attitudinal and cognitive consistency; and (3) in order to prepare for action in a complex environment, an individual strives for and attempts to maintain UBO. The UBO concept, therefore, represents a motivational postulate used to explain consistency theories and—unlike balance theory which postulates a homeostatic mechanism or dissonance theory which likens dissonance to an acquired drive—the authors imply that cognitive consistency is functional and adaptive in avoiding conflict and inhibition.

Another Jones and Gerard innovation that impressed this reviewer is their typology of social interaction in terms of contingency. They provide a conceptual framework in which dyadic interaction may be classified on the basis of the extent to which one person's responses are determined by the previous responses of the other. The authors then classify the events of interpersonal contingency into two types: outcome control based upon reward-cost outcomes and cue control, or the arousal of learned and innate dispositions provided by appropriate information and cues. The authors, therefore, depart from Thibaut and Kelley's model of dyadic interaction based solely on reward-cost considerations, and postulate cue control as another influence in social interaction.

IT is obvious that the writers have succeeded admirably in writing a highly readable, systematic presentation of social psychology emphasizing the experimental approach. In many chapters, the authors illustrate how one study suggests and leads to another, and gives the reader a feeling for the programmatic and sequential nature of research. But as Jones and Gerard state in the preface, "The fact that we have tried to carry basic ideas from chapter to chapter and that we have been more fatally drawn to experimental than to correlational data means that the final product is less comprehensive than many existing texts." Thus, most of the social psychological research based upon surveys and field studies have been excluded.

Whether this is desirable or undesirable depends, of course, on the purpose of the introductory course in social psychology, and on the personal preferences of the teacher. If the purpose of the course is to introduce the student to a broad survey of the social psychological literature, it should include all types of contributions—field studies as well as experimental studies; case studies as well as large sample studies; sociological and anthropological studies as well as psychological studies. Based upon this criterion, the Jones and Gerard book has serious shortcomings. On the other hand, if the

primary purpose of the introductory course is to introduce the student to basic concepts and principles that are based upon a logical and theoretical foundation, the book seems highly appropriate. Using this criterion, the book is highly recommended and should be seriously considered as a text. In the reviewer's opinion, the first course should lay the foundation for subsequent exposure to the diverse and complex problems of social psychology, so that the serious student may become better prepared to read and evaluate the research evidence on its own merit.

Finally, despite the fact that the book is well organized and written, it is not easy to read and understand. The reader is introduced to many complex ideas and the average undergraduate will undoubtedly have difficulty with much of the material. In the reviewer's opinion, the most serious limitation of this book as a text for an introductory social psychology course is its difficulty level. The above average student, on the other hand, will profit greatly from reading it. Accordingly, the Jones and Gerard might be used more appropriately in an honors course for undergraduates or in an advance social psychology course for seniors and graduate students. In fact, it is highly likely that many chapters in this book will become required reading for graduate students in social psychology.

OF the five remaining books, three of them—Sargent & Williamson, Watson, and Hollander—are standard texts covering many areas of social psychology. None of these books, however, is as comprehensive as the recent text by Secord and Backman. The main advantage of comprehensive books such as these is that the teacher may select and exclude chapters to suit his personal bias and organizational preferences. This flexibility, however, is not gained without incurring some cost. Each of the topics is inevitably covered very superficially—in some cases so superficially that supplementary readings may have to be assigned—and if enough chapters are omitted, a book of readings may be necessary.

Apparently, many comprehensive

texts such as these are specifically intended to be used in this way. Sargent and Williamson, for example, state: "This book is an introductory textbook in social psychology that can be used in either psychology or sociology departments. Its broad range of topics allows the instructor to select those chapters that he feels are most relevant to social psychology, and to assign others as background reading" (p. iii).

In accordance with this purpose, the third edition of the book by Sargent and Williamson includes major additions in both the basic and applied areas of social psychology. In addition to being up-dated, it includes: (a) an expansion of the section on culture and personality with an entire chapter on national character; (b) additional chapters on attitudes and on group processes; and (c) a chapter on the social psychology of mental health.

Although the book is neither original nor unique in presentation and organization, it is highly readable and the beginning student should have little difficulty in understanding the basic ideas and concepts. One of the strongest areas of the book is the coverage of the personality domain—the chapter on the development of personality and the self is excellent—and with the expansion of the culture and personality area, this is one of the most salient features of the book.

The main weakness of this book is that it fails to emphasize theoretical developments in social psychology and to deal adequately with basic theoretical issues and problems. Throughout the book the emphasis is on facts and conclusions with little attempt to integrate and organize these facts on some theoretical basis. Accordingly, those who expect in an introductory text an emphasis on theory and principles and a fairly thorough presentation of the "basic" processes in social psychology will be sadly disappointed with this book. On the other hand, for those who expect in an introductory text a balance between basic and applied processes, between sociological, anthropological, and psychological contributions, and between experimental and field approaches to social psychology, the book will not be a disappointment.

Watson's text is also comprehensive but is unusual in that the central theme throughout the book is on the *applications* of social psychological theory and research. In the preface the author states: "Foremost is our conviction that social psychology, in the years ahead, should contribute far more than it has in the past to enrichment of personal understanding and to a constructive attack on major social problems." The author also states, "it is recognized, of course, that most students of this book do not intend to make a career of research. Only a few will dedicate their lives to scientific investigation. Hence, attention is also given to the bearing of social psychological facts and theories on the practical concerns and puzzling issues of life" (p. 13).

The author's point is quite compelling. Very few students who enroll in an introductory social psychology course intend to make a career of research, and perhaps the beginning student should not be given a scientifically rigorous and theoretically sophisticated presentation of the subject matter. Yet, it also seems reasonable to argue that a student should be aware of the limitations and problems of social psychological research, of the differences in aims and orientations of basic vs. applied research, and of the dangers and pitfalls not only of generalizing from laboratory studies to field situations but from one field situation to another. In short, there should be some balance between the emphasis on theory, method, and the implications of social psychological research for applied problems.

Another salient feature of this book is the extremely large number of references to published research. The bibliography alone consists of 46 pages containing 1217 references. Unfortunately, the beginning student is likely to find it difficult to distinguish between those studies which are theoretically significant and relevant and those which are interesting but not so relevant.

The greatest value of this book is its persistent concern with applications, and in general, the author seems to have accomplished his stated purpose. Many studies are cited to illustrate and to support social psychological principles, and suggestions are made throughout

the book about the various ways in which these principles might be applied in everyday life. Thus, it effectively communicates the relevance of social psychological research to current social problems. Certainly there is a place for this type of book and for those who wish to emphasize applications, this book is highly recommended.

THE BOOK by Hollander, the third comprehensive text, is different from the other two in that its major emphasis is on the behavior of individuals on the psychological level of analysis. The author states that, "The prime concept in my treatment of the field is social influence. . . . The book's approach is therefore very much person-centered within a systematic scheme that looks at social influence in transactional terms. In this sense, it brings together the contemporary emphases on cognition, the perceptual features of social interaction, and concepts of social reward and social exchange" (p. vii).

The author adopts the Allportian view that social psychology is an extension of psychology and rejects the notion that it "represents a halfway house between psychology on one side and sociology and cultural anthropology on the other" (p. 9). This does not imply, however, that the author neglects contributions from other disciplines; indeed, a great deal of emphasis is placed on societal and cultural influences on behavior. Three chapters, for example, are devoted to cultural and sub-cultural influences.

Compared to the other two comprehensive texts, Hollander is the least comprehensive, places greater emphasis on theoretical issues and problems, and seems to be more successful in integrating systematically the basic concepts and principles from chapter to chapter. The strongest feature of the book is its simplicity and readability; basic concepts and principles are organized and presented in simple terms and the beginning student will undoubtedly have little difficulty with any of the material. Particularly good is his presentation of group processes using exchange theory as the basis for integrating the various research studies in the area.

The major limitation of the book, on the other hand, is that it is extremely superficial and attempts to cover too much too lightly. Furthermore, the reviewer was extremely disappointed with the brief discussion of social motivation, social perception, and the relationship between cognitive and motivational processes. This deficiency is quite serious in that the central theme of the book is the psychological basis of the social influence process, and it seems reasonable to expect that the author would have devoted much more space to emphasize these basic psychological processes. However, despite its superficiality and the failure to emphasize adequately the basic psychological processes, the reviewer recommends this book for those who desire a text which is simple, highly readable, and emphasizes theoretical issues and problems of social psychology.

THE remaining two books by Doby and by Dewey and Humber cannot be described as "standard" social psychology texts. Apparently both books were written for a unique type of social psychology course offered at the authors' respective institutions. Much of the material in both books [for example] though certainly relevant for social psychology, is usually and more appropriately presented in other courses in psychology. Accordingly, in the reviewer's opinion, these books would not be suitable for a typical or conventional course in introductory social psychology.

The book by Doby, like the book by Jones and Gerard, does not attempt to survey the field of social psychology. But here the similarity ends. In the preface the author states, ". . . this book is not eclectic nor is it meant to be a reference source. It is instead an effort to organize the major problems and data of social psychology into a reasonably unified scheme." The author has been relatively successful in presenting "a reasonably unified scheme," but has presented only a very narrow and biased subset of "the major problems and data of social psychology." Asch's name never appears anywhere in the book; neither Heider's name nor any reference to balance theory appears in

the body of the text (although there are two footnotes to Heider); Gordon Allport's name is never mentioned; and the contributions of Lewin, Bruner, and Morton Deutsch consist of one sentence each! It seems extremely incongruous to find such omissions and then to find an entire chapter devoted to statistics and experimental design and one chapter devoted to the philosophy of science.

The central theme of the book is that behavior is a function of the interplay between biological, physiological, and social processes. In the reviewer's opinion, the main weakness of the book is that the author is so concerned with the effects of biological and cultural forces on behavior that he fails to deal adequately with the role of these forces, and other relevant variables, on the process of human interaction and social influence.

The chapters on perception, social judgment, and learning are excellent, and provide a sound foundation for the study of social interaction. Unfortunately, the author fails to follow-through on this presentation by discussing the relevance and significance of these topics for interaction processes. The chapter on perception, for example, is excellent but is not, in the reviewer's opinion, a chapter on social perception. What is lacking is a discussion of interpersonal perception and how perceptual processes affect the nature and course of interaction.

Finally, the book by Dewey and Humber is unique in that it is clearly inappropriate for a course in social psychology. It is really a composite of the topics usually covered in introductory psychology and sociology courses with an emphasis on the role of biological and sociocultural influences on personality growth and development. It is a revision of their 1951 book entitled, "The Development of Human Behavior," and judging from the contents of the new edition the authors should have retained the earlier title. The authors do not describe the nature of the revision, but whatever the changes, it is clearly not a book about contemporary theory and research in social psychology.

A Critical Analysis of Projective Techniques

Joseph Zubin, Leonard D. Eron and Florence Schumer

An Experimental Approach to Projective Techniques. New York: Wiley, 1965. Pp. xix + 645. \$13.50.

Reviewed by SHELDON J. KORCHIN

The first of the three authors, Joseph Zubin, is Chief of Psychiatric Research (Biometrics) in the New York State Department of Mental Hygiene, and Professor of Psychology, Columbia University. The second author, Leonard D. Eron, is Professor of Psychology and Director of Graduate Training in Clinical Psychology, University of Iowa. The third author, Florence Schumer, is Senior Research Associate at the Wiltwyck School for Boys. They are further identified in the review.

The reviewer, Sheldon J. Korchin, received his PhD in 1946 from Harvard University. He is now Professor of Psychology and Head, Psychology Clinic, at the University of California at Berkeley, where he is reorganizing and developing the clinical program and in particular an on-campus teaching clinic. He is co-author of Anxiety and Stress.

It is now well over thirty years since projective techniques erupted onto the American psychological scene—to the delight of those who, impatient with the values and methods of 'scientific psychology,' were eager to describe, measure, and understand subtle yet important personality processes of relevance to clinical action, and to the dismay of those who, proud in their scientific identities, saw these procedures as flaunting canons of psychometric and experimental science. In the years since, thousands of articles and books have

been published by protagonists and antagonists alike. But whether all this is seen as adding up to a breakthrough or breakdown of psychological science, to accomplishment or mass delusion, largely depends—now as then—on one's orienting values, whether to the "left" or "right" on S. S. Tomkins's ideological dimension. Doubtless, rightists and leftists will continue publishing while minimizing or ignoring each other's work. Still, the massive accumulation of literature requires careful and open-minded study if the current status and future needs of the field are to be fairly established.

To this end, this lengthy and detailed volume both contributes and detracts. Written from a 'rightist' position, it is a critical analysis of the status of projective techniques, mainly Rorschach and TAT, that assembles and reviews with great thoroughness the research literature. Most prominently considered are the field of perception, methodological issues of validity and reliability, experimentally demonstrated determinants of test behavior, and the authors' own Rorschach and TAT scoring systems, proposed to improve future research. In contrast and by intent, not much attention is given to personality theory or to clinical theory, research, or practice. "The present book is an attempt at returning projective techniques to the scientific fold. It provides methods for testing hypotheses and hunches emanat-

ing from the clinic and in this way permits an evaluation of present-day methods in projective techniques. . . . It is hoped that by making explicit some of the dilemmas, contradictions, and blind alleys, as well as advances and achievements of the field of projective techniques, the young clinician will begin to develop an interest in constructing research hypotheses and designs of his own. Even more optimistically, it is hoped that clinicians and clinical students *without* research interests and *without* the healthy skepticism and questioning attitudes that nourish any science will be stimulated to evaluate their tools and make explicit their assumptions. In short, to call attention to the unsubstantiated but taken-for-granted attitudes in the area of projective techniques" (pp. vii-viii. *Italics in original*). The passage gives the authors' purpose and orientation. It also illustrates an unbecoming and unnecessary contentiousness and condescension which pervades the book.

The authors bring considerable qualifications to their task. Joseph Zubin's career extends over virtually the entire history of the field, all of it in a distinguished psychiatric research and clinical center, where he has contributed notably to research methodology, measurement techniques, and research in various areas of psychopathology. With Paul Hoch, he has edited the many volumes of symposia of the American Psychopathological Association, familiar to all in the mental health fields. Leonard Eron and Florence Schumer, both with 1949 PhDs based on methodological studies of projective techniques, have had their own careers heavily involved with teaching, research and clinical utilization of these tests.

THE VOLUME begins with a fine survey of the history, concepts and categorizations, and methodological problems of projective techniques in general. The issues involved in validity studies, and projective procedures in cross-cultural research, are discussed in particular detail. Thereupon follow some 115 close-knit pages which consider theories and research in the field of

perception generally, justified by the observation that projective workers hold "one assumption in common—that perception is the medium through which personality can be assessed" (p. 50). At the end, they note: "Our survey of the perceptual field moreover, has led us to believe that projective tests are not only *not* perceptual tests (in the traditional sense) but would fare better as *instruments* if their advocates looked elsewhere for rationale and methodology, that is, outside the field of perception. . . . The projective worker cannot look to the perceptionist for the answers, for he must handle the general problems involved in the psychology of interpretation—assigning meaning (often verbally) to a stimulus" (pp. 153–154; italics in original). Their phrasing of the issue, and their consequent conclusion, imply a literalness and a way of thinking which can hardly be ascribed to a Beck, Klopfer or even Rorschach, to Rapaport or Schachtel, or to Murray—who used "apperception" quite intentionally—or to similar others who have worked hard to understand the variety of psychological processes which underlie projective test performance. Unfortunately, the authors' approach also slights just that work, particularly of the last decade, that gives promise of bridging the cognitive and personality realms, by considering cognitive processes as functional aspects of personality adaptation. Thus, Werner and Wapner, Witkin and his associates, George Klein and the Menninger-NYU group are discussed briefly and critically, with their work of the preceding ten years inexplicably ignored entirely. While there is material of intrinsic interest in these chapters—including, for example, a fine review of the Gibsons' work—in all, it contributes little to the conceptualization of projective techniques.

Two full and scholarly chapters on the Rorschach and a parallel pair on the TAT review in great detail their history and research literature, again with critical attention to methodological problems. Viewing each as a "psychological experiment" provides a convenient way of covering the effects on test findings of variables related to stimulus, examiner, task, apparatus, subject attitudes, and other aspects of the total

situation. Two further chapters, on derivatives of the TAT and Rorschach, cover quite thoroughly work with other picture techniques and with the Levy Movement Blots (too much neglected in the projective literature) and with the more recent Holtzman technique. These six chapters, forming the bulk of the volume, reflect substantial scholarship and give quite as complete an overview as is contained in any recent handbook.

THE AUTHORS' most distinctive contributions consist of their psychometric approaches to the Rorschach and to the TAT. Not only do they curse the darkness, but they do light a couple of candles. Although interesting in themselves, their own contributions are disappointing in view of their avowed purpose and critical treatment of others. Zubin's Rorschach scoring system, in development since 1941, consists of some 85 variables on which responses are to be rated on scales with well-defined points. In the main, they fall in the conventional categories—location, determinants, content—though some are proliferated (e.g., stimulus attributes) and a variety of responses or subject behaviors not usually scored (though perhaps noted by wise clinicians) are explicitly rated (e.g., "human debasement," "ascendence-submission," "self-estimate of the adequacy of response"). The variables are well-defined and the rating points specified, and the authors report considerable reliability in their use. But no theoretical or other rationale is offered for these rather than other variables; "perceptual" dimensions are used extensively; the system seems to depend on the same sort of inferences made by other Rorschachers; and, finally, no evidence of validity is given. In itself, it is a careful if arbitrary analytical scheme, in line with other Rorschach systems; in the context of their earlier posture, however, this "psychometric approach" is curiously dissociated from their concerns about the state of the field. It even ignores Zubin's provocative argument that the Rorschach should be conceptualized as an interview not as a test. The approach to

the TAT described in this book is the one originally published by Eron in 1950, and used by him and various associates in a number of studies in the early 50's. Considerably more information than could be included in this book, on the use of the techniques, normative data, reliability studies and related material, is obtainable through A

Despite their selectivity and bias and my irritation with the authors' overuse of purr and slur words and their easy expression of contempt for work in the field, which makes their contribution the more disappointing, there is much of value in this book. It can be recommended for the extensive overview of the research literature on the Rorschach, TAT and kindred procedures.

Therapists, Problems, and Therapists' Problems

Carl R. Rogers (Ed.) with the collaboration of Eugene T. Gendlin, Donald J. Kiesler and Charles B. Truax

The Therapeutic Relationship and its Impact: A Study of Psychotherapy with Schizophrenics. Madison, Wis.: University of Wisconsin Press, 1967. Pp. xix + 625. \$12.50/93 s.

Reviewed by ERASMUS HOCH

The editor, Carl R. Rogers, is Resident Fellow at the Western Behavioral Sciences Institute, La Jolla. Eugene T. Gendlin is Associate Professor, Departments of Psychology and Philosophy, University of Chicago. Donald J. Kiesler is Assistant Professor and Senior Counselor, Department of Psychology and University Counseling Service, University of Iowa, and Charles B. Truax

is Associate Professor, Department of Psychology and Director of the Rehabilitation Research and Training Center, University of Arkansas.

The reviewer, Erasmus L. Hoch, is Professor and Administrative Officer in the Department of Psychology at the University of Michigan. His PhD is from Teachers College, Columbia, and his career has included work in VA hospitals, a stint as administrative officer for State and Professional Affairs for APA, as well as teaching.

SOME MOVEMENTS run out of steam; others do especially well on their second wind. This impressive effort of Carl Rogers and his collaborators attests to the latter, coming as it does some 25 years after the publication of a book that ushered in his therapeutic philosophy.

Congruence, empathy and unconditional positive regard, Rogers had earlier concluded, were "... the necessary and sufficient conditions of therapy." The present research was designed to investigate the broad hypothesis that these attitudinal conditions "are invariably followed by a defined process movement" in all human relationships, whether with normals, neurotics, or schizophrenics.

The authors are quick to point out that theirs is primarily a study of the therapeutic relationship as such rather than of schizophrenia as an entity. So that the findings might nevertheless have significance for hospitalized schizophrenics in general, they selected from the schizophrenic population of Mendota State Hospital (that is, those patients so defined by its staff) a stratified sample based on elements shown previously to be related to the process or outcome of therapy, namely, sex, age, and socio-educational level. Normal subjects were picked from volunteers for a project described simply as a research study of personality (without mention of psychotherapy as a possibility). The authors choose not to get into arguments about the dependability of psychiatric diagnoses or about possible bias introduced by using volunteer subjects. They are satisfied to get on with the investigation.

Three groups ("more chronic" schizophrenics, "more acute" schizophrenics, and normal subjects) of 16 individuals each, properly equated, provided the data. By appropriate procedures, half were designated for the usual hospital regimen, the other half for individual psychotherapy in addition. Each of eight therapists was assigned a randomized triad (one "more acute" schizophrenic, one "more chronic" schizophrenic, and one normal subject).

The data are copious. Test batteries were administered periodically throughout; so were carefully designed rating scales for measuring "conditions" (empathy, congruence, and unconditional positive regard) as well as "process" (experiencing, personal constructs, manner of problem expression, and manner of relating). Recorded therapy interviews were available for the experimental subjects, while sampling interviews, held at three-month intervals, were available for every subject.

1204 hours of recorded sessions meant miles of tape. Clearly, even with 200 people involved in the total program of research, analyzing the data *in toto* was an unfeasible task. With a well-defined rationale for the sampling procedure adopted, the investigators proceeded, therefore, to segment the recorded sessions (both therapy and sampling interviews) into more than 3,000 "four-minute auditory snapshots of personal interaction." These formed the pool of data for testing a series of broad hypotheses.

HYPOTHESES that glittered were not always gold. A number were confirmed, others only partially confirmed, still others disconfirmed. Some sobering findings emerged. For example, "the patient, for all his psychosis, or the bright young college student with no knowledge of therapy [the group trained as unbiased judges], turned out to have more useful (and probably more accurate) perceptions of the relationship [than did the respective therapists themselves]." In many respects the process movement of the schizophrenic group was disappointingly small. However, where the crucial "conditions" of therapy existed, the

gains were appreciably greater than in relationships where this was less the case.

A prodigious amount of work was clearly involved in planning the research, devising the instruments, carrying out therapy and evaluation, and analyzing a mass of data. Working under field conditions hardly made the task simpler. Few skeletons were hidden in closets. The daily demands of hospital administration and the dictates of research design did not always coincide. Normal subjects were not always available for interviews after a hard day on the farm. Though a range of therapeutic orientations had been sought, the therapists available turned out to be predominantly client-centered. Some were also inexperienced in working with schizophrenics. All this is honestly faced, however; even verbatim dialogues with critics are included.

The reader given to thinking in terms of process or outcome will likely conclude that the outcome of this huge program, complete with its several spin-off projects, is not its primary contribution. As a demonstration of the process of research, however, the work should prove a valuable lesson in the methodological debits and credits to be expected by the investigator who, on a large scale, hopes to bring reasonably rigorous methods to bear on somewhat intractable problems under sometimes adverse conditions.

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Nature provides for the child's growth in her own fashion, and this should never be thwarted. Do not make him sit still when he wants to run about, nor run when he wants to be quiet. If we did not spoil our children's wills by our blunders their desires would be free from caprice. Let them run, jump, and shout to their heart's content.

—ROUSSEAU

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1968. 375 pages. 7 x 10. Paperbound. Illus. \$4.75

ESTABLISHED 1900

The Ronald Press Company

PSYCHOLOGICAL DEVELOPMENT OF THE CHILD

LANGDON E. LONGSTRETH, University of Southern California

Firmly based on current research in child development this textbook presents in depth the basic factors of heredity, learning, motivation, and intelligence, and then examines the progression from infancy to adulthood with frequent references to the research data. Throughout, the author employs an empirically based, systematic learning-theory frame of reference. Rather than briefly mentioning many studies, he presents a few studies at length to give the student an understanding of procedures and results. The three methods of psychological study are carefully distinguished. Correlational studies

are used to describe the course of psychological development; experimental investigations test the explanations of developmental facts; and, finally, clinical case histories are offered as illustrations of scientifically derived findings. Recent trends are fully covered: cognitive development, as treated by Piaget and others; environmental effects on intelligence, including results from recent physiological experiments; theories of intelligence; heredity and the increasingly significant findings of the role of genes. An Instructor's Supplement is available.
1968. 571 pages. *Illus.* \$8.00

SOCIAL PSYCHOLOGY

S. Stansfeld Sargent, Clinical Psychologist, Phoenix, Arizona; and **Robert C. Williamson**, Lehigh University. 3rd Ed., 1966. 733 pp., *Illus.*, \$8.50

DEVELOPMENTAL COUNSELING

Donald H. Blocher, University of Minnesota. 1966. 250 pp., \$6.00

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Daniel S. Lordahl, University of Miami. 1967. 365 pp., \$8.00

THE PSYCHOLOGY OF EXCEPTIONAL CHILDREN

Karl C. Garrison, University of Georgia; and **Dewey G. Force, Jr.**, University of Minnesota. 4th Ed., 1965. 571 pp., *illus.*, \$7.50

THE ABNORMAL PERSONALITY

Robert W. White, Harvard University. 3rd Ed., 1964. 620 pp., \$8.50

79 Madison Avenue • New York, N.Y. 10016

The Hard and Soft in Psychiatry and a Glimpse of its Future

Alfred M. Freedman and Harold I. Kaplan (Eds.)

Comprehensive Textbook of Psychiatry. Baltimore: Williams & Wilkins, 1967. Pp. xxv + 1666. \$24.75.

Reviewed by JACOB O. SINES

The first editor, Alfred M. Freedman, is Professor and Chairman of the Department of Psychiatry at the New York Medical College and the Director of Psychiatric Services at the Flower and Fifth Avenue Hospitals. He is particularly well known for his work in the field of community psychiatry. The second editor, Harold I. Kaplan, is also Professor of Psychiatry at the New York Medical College and Director of Psychiatric Training at the Flower and Fifth Avenue Hospitals. Both have contributed significantly to an active research and teaching psychiatry program.

The reviewer, Jacob O. Sines, is Professor of Medical Psychology in the Department of Psychiatry at the University of Missouri School of Medicine where he is primarily concerned with objective methods of personality assessment and the study of clinical judgment.

THE EDITORS of the *Comprehensive Textbook of Psychiatry* set out to present an introduction to and an overview of American psychiatry in all of its diversity while faithfully capturing its fundamentally pragmatic character. In doing so, and they certainly did, the editors and 172 other contributors, well chosen to represent psychiatry and related disciplines, have generated a fair, accurate, and generally thorough survey of the field as it is viewed, taught, and practiced today.

The judicious choice of contributors has resulted in a textbook with a rewardingly high level of quality and focus. Several noteworthy sections stand out and will repay the reader for his time and attention. Among these are a sanguine treatment of epidemiology by Lemkau and Crocetti, an unusually well written and impressive review of the development and current status of classical psychoanalytic theory by Mack and Semrad, a 70-page multiple-authored, closely packed, and terse introduction to schizophrenia, Caplan and Caplan's introduction to community psychiatry, and a chapter in which Caldwell discusses the problems encountered by military psychiatry.

There are, of course, several contributions that fail to approximate the overall accuracy or currency of this text. Several of these are excessively verbose, imprecise, or involve errors in fact. In his treatment of personality testing, for instance, Piotrowski has reiterated a number of 20-year-old views concerning projective testing and has promulgated a creative but erroneous history of the MMPI. It is indeed unfortunate that some of the more sophisticated recent work on psychological diagnostic testing could not at least have been introduced in this section.

But rather than quibble in detail about bits and pieces of this standard-setting textbook I wish to consider sev-

eral issues that have been brought into clear and central focus (these same issues, incidentally, are forcefully demanding attention from clinical psychology).

BASIC ISSUES facing psychiatry that have been put into a meaningful perspective in this volume include: the pragmatic character of the discipline; the importance and the lack of a satisfactory diagnostic system; the ambiguous role of theory; the unsatisfactory state of knowledge concerning effects of treatment; and lastly the potentially devastating discrepancy between demands for service on the one hand and available manpower on the other.

The practical orientation of American psychiatry is dramatically and unequivocally illustrated in the excellent chapters on epidemiology and schizophrenia mentioned earlier, in Robins's starkly objective section on personality disorders, most clearly in the chapter dealing with organic therapies, and finally in the introduction to military psychiatry. These sections may impress some tender minded readers as evidence of a cavalier dismissal of theory and the construction of an almost insurmountable barrier to a true understanding of human behavior.

But a careful reading of these sections makes it very clear that psychiatry has evolved its methods and techniques in response to demands for immediate attention to massive and real problems. As Lemkau and Crocetti state "Action cannot be delayed at many points . . . [some therapeutic and preventive measures] may prove to be as ill-founded as building fires was for controlling plague . . . [while we mistakenly build fires in the street] some other kind of removal of the handle of the Broad Street pump may be encountered." Kalinowsky summarizes his review of the effects of electric convulsive therapy in depression by stating that "we must admit that we are very successfully treating conditions of unknown cause with treatments of an equally unknown mode of action."

The problems for which psychiatry has developed effective treatment methods are thus highlighted, but there are pitfalls inherent in an overly pragmatic approach, and these are recognized also.

A thread of dissatisfaction with a primary concern for practical consequences is present throughout this book, but is most clearly voiced by Hendin in his section on suicide where he states, relative to suicide prevention centers, "The prevention centers, although they attempt this activity, give the illusion of doing something more significant and specific [than they actually do] for the over-all problem of suicide."

Thus, the danger is recognized that even the practitioner of a pragmatic discipline may be sidetracked into doing something *with* a problem, rather than doing anything *about* that problem.

The diagnostic process and problems of differential diagnosis are treated in most of the sections devoted to the various syndromes and reaction patterns. Henry Brill, in an 8-page section addressed specifically to nosology, provides a condensed introduction to this crucial issue, and the seven references he has included, although they are secondary sources, will lead the interested reader directly into the thick of this delightfully stimulating problem.

The dissatisfaction with the current official diagnostic system is clearly expressed by many of the contributors, and several of the psychiatrists despair of the "medical model" rather vehemently. This text, while organized in part around our present diagnostic system, attends to the transitional state of that system and most of the contributors reflect, either implicitly or explicitly, the editors' view that nosology takes on special importance only when efforts to prevent and to treat behavior disorders are differentiated and individualized; conversely, diagnosis is of no practical value "for those who are wedded to single general-purpose therapies."

ONE HUNDRED AND FIFTY PAGES, about 10% of this book, are devoted specifically to the presentation of the range of therapeutic techniques employed in psychiatry. In sections dealing with the various syndromes there are also discussions of indications for treatment and results to be expected from the use of certain treatment methods. In spite of this emphasis on therapy only 5 of the 1666 pages in this volume

are devoted explicitly to the topic of "Evaluation of Psychiatric Treatment." In the context of a pragmatic discipline this neglect of such a fundamental issue is at least unfortunate. The basic advances in psychiatry have been due, by and large, to the overwhelming practical results-oriented character of its practitioners. The talking types of psychotherapy are, however, sustained primarily by expectations of their effectiveness. Talking therapies seem somehow to have escaped the harshly utilitarian tests to which other psychiatric treatment methods have been subjected. A general suspension of critical judgment concerning the usefulness of psychotherapy seems to be pretty broadly accepted in psychiatry, and the challenges involved in any efforts to evaluate psychotherapy seem to have been bypassed by many investigators. This serious defect in psychiatry (indeed this defect of all of the mental health professions) is explicitly recognized by Harrison when he correctly states that, "The methodological problems inherent in the evaluative process have proved so great that many investigators have shifted their focus from study of the results of psychotherapy to examining the process of psychotherapy."

The editors attempted to compensate for the weaknesses of an overly pragmatic discipline by emphasizing, among other things, theoretical models. As it turns out there is little more than variation on one theory. Although two of the outstanding chapters in this book deal with psychoanalytic views (Chapter 6, "Classical Psychoanalysis," by Mack and Semrad, and Chapter 14.1, "Psychoneurotic Disorders of Children," by Anthony), I am distressed by the extent to which this textbook is permeated by psychoanalytically derived purposive, post-hoc explanation and implied understanding of human behavior. This emphasis contrasts sharply with the pragmatism mentioned earlier and raises the possibility that while such an overly tidy purposiveness and understanding may accurately characterize what is *said* about behavior, it does not necessarily determine what is *done* about behavior.

A textbook as excellent as this one must be allowed one more serious defect. Freedman and Kaplan have docu-

mented the impressive expansion of the number and variety of the areas to which psychiatry has addressed itself. The very proliferation of outlets for psychiatric services and consultation, to which the field owes its recent development, threatens to inundate the clinical psychiatrist, not with requests, but with *demands* for service. There is, however, no systematic discussion of the critical manpower situation. Psychiatry is in fact responding energetically to these major social pressures, as many other professions are, and some exposition of the way in which it is proposing to meet this challenge would have been very pertinent and timely.

Freedman and Kaplan's textbook can be compared to only one other modern work in the field; Arieti's *American Handbook of Psychiatry* (CP, 1960, 5, 177-179). Whereas Arieti chose to deal with the field of psychiatry initially in two good-sized volumes, here this feat is attempted in one huge volume. The book is thus not built to be read conveniently in many of the casual poses often assumed by a serious reader. Furthermore, the editors' decision to compress this material into one volume forced them to present some of it in smaller, harder-to-read type and made it necessary to limit the number of references in each section. Even though the references were selected with care and good judgment, a large proportion of them are secondary sources and they are few. As a result I must say that Arieti's *Handbook* provides a much more thorough bibliography. But the Freedman and Kaplan book surveys the field more completely than the first two volumes of the *Handbook* and, Arieti's Volume 3 notwithstanding, it continues to be more comprehensive while presenting the material in a more logically organized format.

Now, lest any of the above be misinterpreted, let me summarize by stating very clearly that Freedman and Kaplan's *Comprehensive Textbook of Psychiatry* is an outstanding overview and introduction to the field. It accurately and fairly depicts a field of medicine that, more than any other, is undergoing rapid change and, more than any other, is facing and adapting to massive pressures. I heartily recommend

this book as an authoritative up-to-date truly comprehensive textbook of psychiatry.

Tribute to Piaget

Bärbel Inhelder (Ed.)

Psychologie et Épistémologie Génétiques: Thèmes Piagétien.
Paris: Dunod, 1966. Pp. xxi + 421.

Reviewed by DAVID ELKIND

The editor of this book, Bärbel Inhelder, is Professor of Developmental Psychology at the University of Geneva and Piaget's long standing colleague and collaborator. Their most recent volume *L'image Mentale* was recently reviewed in these pages. A new book on memory is due some time soon.

The reviewer, David Elkind, Professor of Psychology at the University of Rochester, is an avowed Piagetophile. Together with John Flavell, he is editing an American Festschrift to Piaget. It will be published by Oxford University Press some time this year.

OVER the past few years, it has become increasingly evident that Jean Piaget will eventually stand next to Freud with respect to his contributions to psychology and to related fields of enquiry. Like Freud, Piaget has constructed a new discipline, genetic epistemology, with its own problems, concepts, and methodology. As in the case of psychoanalysis, Piaget's genetic epistemology has relevance to fields of study far removed from psychology and social science. In this volume, a Festschrift in honor of Piaget's 70th birthday, there are works by sociologists, biologists, logicians, philosophers, and physicists as well as by psychiatrists, psychologists, and educators. Indeed, the articles by the non-psychologists are especially revealing because they demonstrate the

scope of Piaget's system and the breadth of his influence.

There is little point to recapping the individual contributions to this volume which are many and extraordinarily varied with respect to focus and content. Some idea of the diversity involved can be gleaned from the nine major headings under which the papers are grouped: Questions of Method; Epistemology and the Logic of the Subject; Factors and Regulations in Development; Learning and the Role of Experience; Perception and Knowledge; Pedagogical Perspectives; Clinical Perspectives; Epistemology and the Social Sciences; Knowledge and Biology. Despite this variety I found the papers to be, with few exceptions, of high quality both with respect to style and freshness.

ALTHOUGH it is perhaps not fair to single out particular sections for praise or criticism (since with such diversity, personal interest and involvement are bound to determine preference) I found the papers on learning and the role of experience by Laurendeau and Pinard, Wohwill, Berlyne and Wolff, to be among the most rewarding. On the other hand, the papers on the clinical perspective were, from my point of view, rather disappointing. This does not really reflect upon the authors of the articles, such as Ajuriaguerra and E. J. Anthony, who have made very real contributions in this area, but rather upon the enormity of the task itself. The task is enormous because the two orientations are so different. Freud attempted to show how thought is translated into action whereas Piaget has endeavored to account for how action is transformed into thought. To bring these two systems into some sort of complementary relationship one must, or so it seems to me, start from their fundamental differences rather than from surface similarities.

For confirmed Piagetophiles, this book provides some special treats. One of these is the relatively complete bibliography of Piaget's writings. A bibliography, by the way, which runs to some 32 pages! Another treat is Vinh Bang's amusing paper on the vicissitudes taken by Piaget's clinical (critical)

methodology over the past 45 years. Many of the other papers on one or another aspect of Piaget's work put it in a new light or reveal some of its hidden or neglected aspects. Not all of the papers are entirely laudatory, however, and some take issue with Piaget. A case in point is Fraisse's discussion which continues his friendly controversy with Piaget regarding the estimation of time. There is, then, much to nibble on in this book. Indeed, a good many of the pieces are quite short and are more in the way of intellectual appetizers than full cognitive meals. In short, this is a book for browsing and for dipping into and is not the sort of thing one wants to read through in one or two sittings.

This book was meant to honor Piaget and it does. From the touchingly moving forward by Inhelder to the various pieces contributed by Piaget's colleagues, friends and students, the overriding tone is one both of great respect and admiration and also of warm personal regard. It is, in a very real sense then, a tribute both to the man and to his work.

West of Eden

Robert Waelder

Progress and Revolution: A Study of the Issues of Our Age. New York: International Universities Press, 1967. Pp. viii + 372. \$7.00.

Reviewed by HAROLD MCCURDY

The author, the late Robert Waelder, received a 1922 PhD from the University of Vienna and stayed at the Vienna Psychoanalytic Institute until 1938 when he moved to the Boston Psychoanalytic Institute. Since 1946 he was in Philadelphia connected with various psychoanalytic organizations; since 1962 he was affiliated with the Jefferson Medical College as Professor of Psychiatry. He was author of *Psy-*

chological Aspects of War and Peace, Basic Theory of Psychoanalysis, and Psychoanalytic Avenues to Art.

The reviewer, Harold McCurdy, is Kenan Professor of Psychology at the University of North Carolina. Of relevance to this review is the fact that he has always tended to see society in terms of personality and personality in terms of society, and has been drawn to the study of both individuals and groups in search of the conditions of creative harmony.

"AN AGE of progress," writes Waelder, "is bound to be an age of anxiety and resentment." His book spins around this axis, moving through a discussion of progress and revolution to a climactic view of the perilous instability of the whole world, intoxicated by the affluent civilization of the West, where a Janus-faced science has produced complexities beyond the control of either science or the art of politics. It comes to rest at the end in the comforting, though ambiguous, thought that under the sociopolitical gloom "There is still the anonymous mass of common people, trying to live their lives and build their nests, adjusting to currents and storms as best they can, and forever building anew when the volcano has erupted and has destroyed their homes and gardens."

The distinguished psychoanalytic author makes little obvious use of psychoanalysis. Freud is quoted far less often than Aristotle and de Tocqueville. Nowhere do we encounter explanations in the style of *Totem and Taboo*, *Group Psychology and the Analysis of the Ego*, or *Moses and Monotheism*. We are more in the company of Adam than of Oedipus, and the sin is not parricide or incest but the violation of the Tree of Knowledge. Science is "the consequence of an act of rebellion against God." Scientific man, advocate and architect of progress, "is no longer merely emancipated from divine guidance; he is himself becoming God." The cost is an uneasy conscience and political violence.

A conspicuous entry in the debit column is the amount of hatred ex-

pendent against scapegoats. Today's trinity of scapegoats, according to Waelder, are capitalism, the Jews, and Western imperialism, all three of which he defends—in the name of progress. With accurate pride he notes that the Jewish contribution to modern science has been disproportionately large. "When the Hitler policies drove German scientists to emigration—not all, though most of them, Jews—the German universities lost half of their physicists and two thirds of their physical chemists; yet only about 1 per cent of the population of pre-Hitler Germany was Jewish." So we have the irony that the chief creators of progress are its chief victims. The fulfilled beast kicks over the empty pail.

CAN political unrest be controlled? Waelder suggests that one remedy might be to discourage messianic ideas and cultivate humanistic ones. That means, in the Judaic tradition, that the Sermon on the Mount should be rejected in favor of the homelier wisdom of Hillel, typified by the saying: "If I am not for myself, who will be for me? Yet if I am for myself only, what am I?" The high messianic line, according to Waelder, inevitably leads to political Utopianism and thence to persecution, as illustrated by the anti-Semitism of Christianity, Mohammedanism, Nazism, and Communism. He quotes approvingly Goethe's radical solution of the messianic problem: "One should crucify every dreamer in his thirtieth year."

On violence and revolution Waelder makes many shrewd comments. He is impressed by the peculiar effectiveness of guerilla warfare when directed against mild governments, such as that of the United States. This strategy, which in de Jouvenel's words combines "the manners of gangsters with the moral benefits of martyrdom," goads a benevolent ruling power into either despotism or abdication. Waelder does not say which choice he would recommend. Perhaps there is a third alternative, hinted at in his preface, where he remarks that our civilization has two roots which have never merged, "the Hellenic search for

charity." If the possibility of that union exists, it is very difficult to understand how it might be achieved by following Goethe's crucifixion prescription. Yet it may be that the depths of reality contain even such a Mystery as this.

Thing and No-Thing

Theodore Thass-Thienemann

The Subconscious Language. New York: Washington Square Press, 1967. Pp. viii + 437. \$6.95.

Reviewed by G. WILLIAM DOMHOFF
and CALVIN S. HALL

The author, Theodore Thass-Thienemann, is a native of Hungary and was educated at the Universities of Budapest, Leipzig, Berlin, and Paris. He has been a Professor at the University of Budapest and is a member of the Hungarian Academy of Science. At present he is Professor of Psychology at Gordon College and Emerson College and a consultant to the Judge Baker Foundation.

The first reviewer, G. William Domhoff, is Assistant Professor of Psychology and Fellow of Cowell College, University of Santa Cruz. He says that he is interested in finding "respectable" ways of studying Freudian notions—hence an involvement in dream research. He is also interested in the ideas of modern American Marxists such as Paul Sweezy and Paul Baran; this interest has resulted in a book, *Who Rules America?* The second reviewer is Calvin S. Hall, Director of the Institute of Dream Research and Lecturer, University of California, Santa Cruz. His latest book is *The Content Analysis of Dreams* (with R. L. Van de Castle).

THE ASSUMPTIONS on which this book is based may be summarized as follows:

1. Words like dreams have a latent as well as a manifest meaning. Manifest

meanings are found in a dictionary; latent meanings are discovered and uncovered primarily but not entirely by etymological and comparative research into the history and development of (by and large) Indo-European, Hungarian, and Hebraic languages. From such studies come the "meaning complexes" that underlie seemingly unrelated word clusters, just as "dream thoughts" or "wishes" are found to underlie the puzzles presented by many dreams. The great linguist Karl Vossler said all good etymologists are interpreters of dreams, and Freud wrote in 1910 that "we should understand the language of dreams better and translate it more easily if we knew more about the development of language."

2. Words do not refer to things but to unconscious fantasies about things. Man's various fantasies are best revealed in word deposits. Charles Osgood said in 1963 that "it is in the 11/12 of the linguistic icebergs below the surface that we must search for the general principles of a science of language." Like Thass-Thienemann, Osgood believes that beneath the surface one finds "shared systems of symbolic representation, the universal mechanisms for metaphor and synesthesia—all formed in the interaction of human biology and psychology with a fundamentally common environment."

3. The referents of words were originally fantasies associated with the body and its functions, especially those having to do with eating (from whence we get words for pleasure and fulfillment), elimination (from whence we get many words for business and money), and sex (from whence we get many words for knowledge, creativity, and thinking).

4. Anxiety is the motive force for the transformation of language. Because of anxiety, the original "hot" meaning of words is repressed and new "cool" meanings appear or the word is demoted to a meaningless auxiliary.

5. The stronger the impulse that is repressed, the more abundant are its manifestations on the surface of language. A whole cluster of words with the same root but very different meanings indicates they are the offspring of the same highly-charged fantasy.

6. Language consists of many compromise formations between expression and repression. This unending clash leads to the return of "old" meanings in slang, dreams, and jokes.

THE BULK of the present book is concerned not so much with theory, however, as it is with presenting examples. The first section deals with separation and its consequences (emptiness, aloneness, and the search for whole-ness/holi-ness), the second with Oedipus and his mistakes (he was not properly educated, "pulled out," which Thass-Thienemann links to "castrated"), and the third with the attempt to wander back to mother and the fantasized childhood of unrepressed at-one-ment.

Since only a few examples of Thass-Thienemann's findings can be given, consider those with implications for a further understanding of philosophical questions. "Existence," "being," "being there," concerns of ontology, relate to fantasies about the phallus. They are part of meaning complexes conceptualizing "being at hand," "standing out," "out-standing." "Thing" as a general term for that which exists is equally phallic in its etymological and mythical explications, not to mention in slang and nursery talk. But it is in relation to the knotty problem of "nothingness" that the contribution to ontology gets interesting, for Heidegger tells us that the "Thing" has to be put into the "No-Thing" in order to disclose the fullness of its meaning. Perhaps the "No-Thing" that causes dread, anxiety, and wonder is really the vagina, and perhaps existential anxiety gets its real kicker from a jolt of castration anxiety.

EPISTEMOLOGY also may benefit from Thass-Thienemann's work, for he finds there are three basic fantasies underlying words for knowledge—oral fantasies, genital fantasies, and ocular fantasies. Usually the most fulfilling types of knowledge—wisdom, for example—are oral, while the most intimate and adventuresome tend to be genital. Ocular knowledge is apparently the least satisfying type of knowledge, for it is

mere "appearance" for those who prefer to "penetrate" to the "naked" truth of an "inner," "deeper" reality.

In short, what Thass-Thienemann has done in this pioneer effort is to apply the insights of psychoanalysis to language. Just as Freud rescued dreams from the limbo of the supernatural, so it is hoped that Thass-Thienemann's book will rescue psycholinguistics from its present communication bias. Language does indeed communicate, it communicates and expresses at several levels at the same time. It is the unconscious level to which Thass-Thienemann addresses himself. Let us hope that his work inspires the use of such methods as the semantic differential in the development of new, suitable methods, and the study of other language families in order to test his hypotheses in a systematic, replicable way. In the meantime, he has provided a wealth of provocative material regarding a form of behavior that contains the whole history of the unconscious. Language may even replace dreams as the *via regia* to the unconscious.

Males and females would be formed, so far as possible, in the following manner. Females, inclining more to water, grow from foods, drinks and pursuits that are cold, moist and gentle. Males, inclining to fire, grow from foods and regimen that are dry and warm. So if a man would beget a girl, he must use a regimen inclining to water. If he wants a boy, he must live according to a regimen inclining to fire. And not only the man must do this, but also the woman.

—HIPPOCRATES

Brody Minority Group Adolescents in The United States

Dr. Brody has served as editor and contributor to this collection of papers on the social and environmental problems of adolescent minorities in the United States. The other seven contributors bring to this unique and first study of its kind not only their professional knowledge but their experience as members of the minority group for which they write.

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Edited by **EUGENE B. BRODY**, M.D., Professor
and Chairman, Department of Psychiatry,
The Psychiatric Institute, University of
Maryland School of Medicine, Baltimore.
1968 / 233 pp. / \$8.25

Frankenstein Psychodynamics of Externalization Life from Without

Dr. Frankenstein's new book, a sequel to his distinguished *Roots of the Ego*, will be of special interest to sociologists. This is a study of externality of behavior, feeling and judgment and the socio-cultural conditions from which it emerges. As the author points out in his introduction, "It is one of the basic ideals of western culture that men should be able to live from within." But there are major influences in our society today that counteract the inner directives, concepts, and values so essential to mental health and social welfare.

This book takes up the various ways in which social and cultural conditions produce patterns of externalization where "to have" takes the place of "to be," where the autonomous individual gives way to forces that determine—from the outside only—human behavior. These conditions include the technologically oriented life of the middle class and the ambivalent affluent society as well as environments of extreme poverty and educational neglect. All of these patterns, however, have in common; less intensive relationships within the family circle, less repression and less internal tensions, more object related conflicts. The important sociologic implications of this psychodynamic approach to behavioral problems are likely to be felt for some time.

By **CARL FRANKSTEIN**, Ph.D.,
Professor of Special Education at
The Hebrew University, Jerusalem.
1968 / ca. 200 pp. / \$10.75

THE WILLIAMS & WILKINS COMPANY



428 East Preston Street/Baltimore, Maryland

Spheres of Influence of Linguistic Structures

J. Lyons and R. J. Wales (Eds.)

Psycholinguistics Papers: The Proceedings of the 1966 Edinburgh Conference. Edinburgh: Edinburgh University Press, 1966. Pp. 243. \$7.95.

Reviewed by MOSHE ANISFELD

The first editor, J. Lyons, is a linguist and the second, R. J. Wales, is a Lecturer in Psychology, both at Edinburgh University. Most of the other contributors (Ursula Bellugi, J. Fodor, M. Garrett, J. C. Marshall, and D. McNeill) have a primary affiliation with psychology, two (J. P. Thorne and E. S. Klima) are linguists, and all are active investigators of language. Most of the discussants are apparently all psychologists.

The reviewer, Moshe Anisfeld, received his PhD from McGill University in 1962, after which he spent two years of postdoctoral research at Harvard University with forays to M.I.T. for linguistic enlightenment, then returned to McGill for one year. He has been at Cornell since 1965 where he is Assistant Professor of Psychology and teaches courses in language and cognition and does research in these areas.

MOST of the papers and discussions in this volume are concerned, directly or indirectly, with defining the relation of the theories of generative transformational grammarians to a psycholinguistic understanding of the nature and function of language. Are the generative theories developed by linguists merely elegant formal devices for data reduction or do they possess 'psychological reality'? The evidence adduced by the conferees to answer this general question as well as specific

aspects of it was drawn largely from experiments conducted in psychological laboratories. Most of the writers convey a clear impression that this sort of evidence constitutes the ultimate test of the psychological validity of linguistic theories. Since this view of the psycholinguistic experiment as critical *vis-à-vis* linguistic theories is generally shared by psychologists, it bears close examination here.

Our examination will be facilitated by an analysis of a specific aspect of linguistic theory. Consider the notion that sentences are composed of phrases and subphrases at a hierarchy of levels—a notion graphically expressed by tree diagrams of sentences. In this formulation, a sentence like *the boy hit the ball* is broken down on the highest level into two main constituents *the boy* (1) and *hit the ball* (2). Each of these is further broken down to the level of words and lower. So that constituent (2) is analyzed as consisting of *hit* (3) and *the ball* (4), and (4) splits into *the* (5) and *ball* (6). Is this analysis merely a descriptive convenience or does it reflect psychologically functional processes? Many recent psycholinguistic experiments, including a large portion of those discussed in the volume under review, imply that the psychological reality of phrase structure analysis such as this depends on psychological experiments. For instance, one article entitled, "The Psychological Reality of

Linguistic Segments" sets out to provide support for the psychological validity of the major two segments of sentential constituent structure by a demonstration that clicks heard in one ear while listening to sentences in the other tend to be attracted perceptually to the borderline between these segments. Let it be stated categorically that even if the results of this and all other experiments concerned with phrase structure had turned out negatively the psychological reality of phrase structure could not be doubted, for the evidence for it is overwhelming. The following phenomenon, which for expository purposes will be framed in terms of a psychological experiment, is typical of the kind of evidence that can be adduced in its favor. Subjects are given a set of 50 pairs of sentences, e.g., *John Doe is a student at Cornell* and *Jane Jones is a student at Cornell*, and are instructed to conjoin these pairs into single sentences, e.g., *John Doe and Jane Jones are students at Cornell*, whenever possible, and to indicate which pairs cannot be conjoined. In analyzing the results the experimenter will want to formulate the rules that guided the subjects in their responses. A rule which states that subjects eliminate duplicate words, insert the word *and*, and adjust the number of the copula and the noun would be adequate for the sample case. But it could not handle a large number of other cases such as the pair *the boy from Boston is a student at Cornell* and *the girl from New York is a student at Cornell* which combine to form *the boy from Boston and the girl from New York are students at Cornell* not *the boy from Boston and girl from New York are students at Cornell*. It is clear that in conjoining sentences individuals do not cancel duplicate words but rather duplicate phrases. Moreover, as Chomsky (*Syntactic Structures*, 1957, pp. 35-37) pointed out, the corresponding phrases in the to-be-conjoined sentences must belong to the same grammatical category. Thus one legitimately obtains *the scene of the movie and of the play was in Chicago* from (1) *the scene of the movie was in Chicago* and (2) *the scene of the play was in Chicago*, but not *the scene of the movie and that I wrote was in Chicago*, from

(1) and (3) *the scene that I wrote was in Chicago*, because of the movie and that I wrote belong to different grammatical categories. The first is a prepositional phrase and the second a sentence introduced by a demonstrative pronoun. This "experiment" thus conclusively proves that phrases and phrase categories play an indispensable role in linguistic behavior. Similar conclusions, as well as ones that support finer points of linguistic analysis, can be drawn from an experiment requiring subjects to passivise active sentences, and from many other potential experiments along the same lines. These experiments have never been conducted because their outcome is so highly predictable as to render their execution an empty formality. But the lack of formal experiments should not degrade such phenomena from being considered as psychological evidence and the theories they support from being viewed as psychologically valid.

PSYCHOLOGICAL experiments are therefore not needed to establish the psychological reality of phrase structure and some other linguistic notions with which recent psychological experimentation has been concerned. But they are essential for the delineation of the behavioral domains in which linguistic structures play a role. In other words, granted that certain linguistic structures are valid as psychological constructs, what is the extent of psychological territory subject to their rule? Viewed with regard to this aim of studying the spheres of influence of linguistic structures, an additional criterion emerges for the evaluation of psychological experiments, namely to what extent they represent ecologically important behaviors. Fortunately, although they have been addressed to the inappropriate question of psychological reality, most recent psycholinguistic experiments can be reinterpreted as attempts to map out the extent of influence exerted by linguistic structures in such important aspects of behavior as perception and memory.

Apart from the mapping of the spheres of influence of linguistic structures, psycholinguistics has the task of answering *how* they affect behavior, in

particular, how linguistic structures are involved in language production and comprehension. Generative transformational grammarians have presented fairly explicit theories concerning the manner of sentence generation by systems of grammatical rules. But as has been pointed out in this volume by J. Fodor and M. Garrett, and A. L. Blumenthal the way a grammar generates sentences need not model the way a human who possesses the grammar generates them.

The conference represented in this book did a service by helping to air out the issues involved in this second task of psycholinguistics, namely that of construction of linguistic performance models, and mainly for this reason will be found valuable by the expert in the field. However, as a volume representing many contributors, there is considerable variability in the level of psycholinguistic sophistication, and the person who seeks an introduction to psycholinguistics will not find the book a consistently reliable guide.

Further Aspersions on the Blank Screen

Bernard Steinzor

The Healing Partnership: The Patient as Colleague in Psychotherapy. New York: Harper & Row, 1967. Pp. xi + 264. \$5.95.

Reviewed by HERBERT SILVERMAN

The author, Bernard Steinzor, is identified by the reviewer, Herbert Silverman. Silverman is Chief, Outpatient Psychology Section, VA Hospital, Allen Park, Michigan. He also holds positions as Assistant Professor of Psychology at the University of Michigan and as Adjunct Associate Professor at Wayne State University, and is in part-time private practice. His PhD is from the

University of Michigan and he holds the ABEPP diploma in clinical psychology.

THIS is an excellent book that ought to be of interest to psychotherapists of various persuasions. It deals with psychotherapeutic problems in a sophisticated, candidly autobiographical style and from a humanistic perspective that stresses an equality between patient and therapist that demands that the therapist must be revealing of himself.

Bernard Steinzor is a clinical psychologist of sthenic mood, who, after receiving his doctorate from the University of Chicago in 1947, held staff, chief, and consulting positions in the East. He has engaged in private practice since 1951, currently lives and works in New York City, is also a lecturer in psychiatry and religion at Union Theological Seminary.

His book, while stimulating, evokes debate from one who views psychotherapy as *inevitably structured* by the *circumstances* which bring the participants together and the *purposes* of each. Steinzor argues against structure and system. He persuasively and consistently makes the point that the patient of today, a product of many impersonal forces, is best viewed as an equal, a partner, a colleague, and in a spirit of mutuality; thereby "... the artificiality of psychotherapy is reduced."

But psychotherapy is a process that takes place in an artificially designed relationship and each participant has a role to play, though the prescriptions for these roles vary widely in accord with theories of personality and the individual styles of therapists. In any case, it is this very 'artificiality' (disparaged by Steinzor), which provides the leverage for the sought modification of behavior and experience.

THE MANNER of Steinzor's *choosing patients* illustrates his part in the process: "Since my experience has taught me that I should never try to help someone whom I immediately dislike, I listen to my responses to his person, and if my first impression is negative, I refer him elsewhere" (p. 14). This is a view

of therapy that is precious (in the pejorative sense of the word). It puts too much of a premium on the therapist's attitudes, *his* needs, and idiosyncrasies. Most troubled, unhappy, or neurotic people are not particularly likeable. The therapist's disciplined awareness and the controlled use of his own reactions (an artificial and civilized product) are what may safeguard the relationship.

The acceptance of patients by therapists is determined by more common variables (e.g., the ability of the patient to pay the fee, the therapist's own schedule, the quantity of recent referrals) that may complexly interact with 'liking' in interesting ways. Of course, the therapist should be aware of these factors (unless he is hypocritical) and should strive to control his own needs within reason in the interest of the patient.

The emphasis of some therapists, however, is to dwell upon *their* reactions. I think Stenizor tends to over-share his own personal experiences with patients. In this, he is in the tradition of Jung, the experientialists, the irrationalists of the Atlanta school and, to some extent, the existential analysts.

Therapy is less romantic, more mundane, more like hard work than Steinzor's book indicates; it is more prose than poetry. Yet his book is successful. He courageously presents many of the significant issues (termination, transference, dreams, intimacy, bad results, fees, first names, advice) and *his* approach to them. Whether we agree with his position on some of these matters or not, he provokes us to thought, even to clarification. So this is a precious book, in a sense not only pejorative but true.



Knowledge is not something separate and self-sufficing, but is involved in the process by which life is sustained and evolved.

—DEWEY



Forensic Psychiatry and Human Rights

Jay Katz, Joseph Goldstein, and Alan M. Dershowitz

Psychoanalysis, Psychiatry and Law. New York: Free Press, 1967. Pp. xxiii + 822. \$15.00.

Reviewed by SEYMOUR L. HALLECK

The first author, Jay Katz, a psychiatrist and psychoanalyst, is Associate Professor of Law at Yale Law School and Associate Clinical Professor of Psychiatry at Yale Medical School. With Joseph Goldstein he co-authored The Family and the Law. Joseph Goldstein, the second author, is Professor of Law at Yale Law School. He is a lawyer, political scientist, and research candidate in psychoanalysis. He is author of The Government of a British Trade Union and with Donnelly and Schwartz, of Criminal Law. The third author, Alan M. Dershowitz, is Assistant Professor of Law at Harvard Law School. He served as Law Clerk to Chief Judge David L. Bazelon and to Justice Arthur J. Goldberg. He also has been Editor-in-chief of the Yale Law Journal.

The reviewer, Seymour L. Halleck, is Professor of Psychiatry, University of Wisconsin. He formerly was Chief of Psychiatric Services, Division of Correction, State of Wisconsin, and he still consults with the Division. He has been working in the correctional law and legal field for fifteen years and has been teaching a mixture of psychiatry, law, and sociology for nine. He is author of Psychiatry and the Dilemmas of Crime.

desperately seek a benevolent means of protecting the public from the disruptive and dangerous acts of those who are considered mentally ill. If the simultaneous quest for maximum freedom and maximum stability is to be conducted in a humane and just manner, there is an urgent need for meaningful communication between those who are primarily concerned with protecting rights and those who are entrusted with the responsibility of social control. *Psychoanalysis, Psychiatry and Law* is a comprehensive volume of readings intended to create increased understanding between the professions of law and psychiatry. While the book is primarily written for attorneys who wish to know more about the theories and practice of psychiatry, there is much useful material here for any professional involved in the involuntary treatment of disturbed people.

The authors have painstakingly selected relevant psychiatric papers, public documents, legal cases, and philosophical treatises and arranged them in a manner that illuminates the crucial issues of legal psychiatry. Except for brief introductory sections in which critical questions are asked, the authors do not provide a discussion of concepts or issues, but let the papers speak for themselves. Their selection of material is excellent (there is really not a dull article in the book). The lack of explanatory material will, however, create

OUR SOCIETY is deeply committed to two values which are sometimes contradictory. On the one hand we are concerned with protecting the rights of individuals. On the other hand, we

problems for the unsophisticated reader. A specialist can easily read through this book for pleasure and enlightenment. The beginning student in law or psychiatry will find it a useful reference. But without classroom discussion or supplementary readings, the young student might find much of this work extremely difficult.

THE first part of the book is intended to emphasize the usefulness of psychoanalysis in providing new perspectives on legal problems. Papers outlining classical psychoanalytic positions are followed by philosophical readings or legal case studies which may be relevant to that psychoanalytic concept. While this section makes interesting reading one might question the thoroughness with which the authors have explored psychoanalytic theory. Undoubtedly, the relationship of psychoanalysis to law is important but given the format of this book, the emphasis may be misleading.

The second part of this book is concerned with practical issues in psychiatry and law. Since there are few bridges between part 1 and part 2, the reader may be left with the impression that all of psychiatric practice is based on psychoanalytic theory. Nowhere in this book is there acknowledgment of the degree to which psychiatrists who involve themselves in controlling deviant behavior are influenced by the theories that underlie the use of physical therapies, behavior therapies, or existential therapies. Yet psychiatry, particularly psychiatry that is practiced in the correctional or mental hospital setting, has far broader roots than those represented by psychoanalysis.

In spite of this limitation, the second part of the book is excellent and must be considered as thorough and enlightening a presentation of issues related to law and psychiatry as exists in the literature. The readings here illuminate such crucial issues as indeterminate sentencing, involuntary commitment, criminal responsibility, the meaning of psychiatric treatment, and the diagnosis of dangerous behavior. Each of the important issues is presented in clear perspective, yet none are over-simplified.

One of the distinct values of this book is that the authors have elected to present a broader view of issues relevant to law and psychiatry than is found in most similar texts. There is a discouraging tendency on the part of those who write about forensic psychiatry to focus on the glamorous but perhaps over-studied question of criminal responsibility. The authors of *Psychoanalysis, Psychiatry and Law* consider thoroughly the issues of criminal responsibility but also present a discussion of legal issues involved in civil and criminal commitments and the problems that arise whenever any person is involuntarily deprived of his liberty.

READING through this book leaves the reader with one inescapable conclusion. The days in which psychiatrists or any other professionals can make clinical decisions that deprive their patients of liberty without being subjected to public scrutiny and criticism are rapidly drawing to an end. This new situation has certain distinct advantages. Patients' rights will be protected. When any person is deprived of liberty on the basis of alleged mental illness it will be necessary to document and explain the nature of that illness and the necessity for involuntary control. Psychiatrists will be forced to sharpen their diagnostic acumen, to reconsider the philosophies underlying their clinical practice and to learn to document their findings in a jargon-free manner.

There are, however, certain disadvantages to this new public surveillance of psychiatric control of deviant behavior. It appears that psychiatrists who work in correctional settings or mental hospitals will have to prepare themselves to spend more and more time in court and this could constitute a serious drain on the limited time that they now have available for treating patients.

We are entering an era in which no psychiatrist can restrict the freedom of any patient without being prepared to justify his actions before the courts and the public. This will create many new problems for both lawyers and psychiatrists. Lawyers will have to familiarize themselves with the theories and tech-

niques of psychiatry. Psychiatrists must become familiar enough with the law so they can appreciate that legal values must sometimes take precedence over what they consider to be medical values. *Psychoanalysis, Psychiatry and Law* is at present the most comprehensive volume to which either professional group can turn to gain such essential knowledge.

Truth, Reality, and Justice

James Marshall

Law and Psychology in Conflict.
Indianapolis: Bobbs-Merrill, 1966.
Pp. xiv + 119. \$5.95.

Reviewed by SALEEM A. SHAH

The author, James Marshall, a graduate of Columbia University and Columbia Law School, is a member of the New York bar and formerly was Adjunct Professor of Public Administration in the Graduate School of Public Administration, New York University. He has been President of the New York City Board of Education, and was awarded the Butler Medal for contributions to political philosophy by Columbia University, for his book, *Swords and Symbols: The Techniques of Sovereignty*.

The reviewer, Saleem A. Shah, is Consultant and Acting Chief, Center for Studies of Crime and Delinquency, NIMH. For ten years prior to that he was chief clinical psychologist with the Legal Psychiatric Division of the D. C. Department of Public Health. He is a native of India and received his BA from Allahabad University and did a year of graduate work in psychology at Lucknow University before coming to the US in 1953, finishing up his graduate work at Pennsylvania State University. He has two main areas of interest: one covers the broad area of delin-

quency, crime, corrections and law and mental health; the other area is behavioral approaches to treatment.

THE AUTHOR, a member of the New York bar, has assembled a body of psychological research which casts serious doubts on many assumptions underlying legal rules of evidence and on the accuracy of fact-finding through trials. For the law, the basic problem of determining truth is viewed as stemming not so much from the villainy of perjurers and suborners of perjury as from the unreliability of personal observations and reports by witnesses.

The above points have been made before. It was as long ago as 1908, when Hugo Munsterberg first published his *On the Witness Stand*, that discrepancies between psychological processes such as perception and recall and the assumptions of the judicial system were discussed. Likewise, in his *Courts on Trial*, the late Judge Jerome Frank—a shining light among the group of lawyers sometimes referred to as “legal realists”—raised cogent questions about many aspects of the judicial process. Frank stated, for example, “. . . trial court fact-finding is the soft spot in the administration of justice.”

The main burden of Marshall's book is to show that there has now accumulated a substantial body of relevant research which clearly establishes the lack of congruence between testimony of witnesses and the events which they describe. The various studies cited in the area of perception and social psychology will probably be “old-hat” to most psychologists. However, the material should provide both novelty and a note of jarring discomfort to many lawyers since it questions and challenges some cherished beliefs and “legal fictions.”

It should be noted that trial court fact-finding—critically important though it be—is not synonymous with law or the legal system. Laws are rules regulating the behavior of members of the society which are promulgated and enforced by agencies of the state. Various legislative, administrative, and executive processes are very much part of the over-all legal system. The above com-

ment seems necessary in order to place the title of the book and its conclusions in appropriate context.

WHILE Marshall is very much concerned about bringing about improvements in judicial fact-finding, some of his comments indicate conceptual problems. Thus, the author's quest for a determination of “truth” and “reality” suggests an implicit if not explicit belief that some form of external reality actually exists independent of various human observations. Also, it should be pointed out that, even though accurate fact-finding is indeed important, the determination of such “truth” is not the sole purpose of the judicial process. It has been maintained by various legal scholars that legal processes are designed to regulate social behavior, resolve disputes, and to do justice. Thus, in terms of recognizing the predominant values of the society and making some social value judgments regarding disputes, it may be that justice can often be done even though fact-finding has not been as accurate as may be wished.

The above issues are fundamental to an understanding of the purpose of legal institutions in a society, and they raise questions of interest to philosophers of science and other scholars. Certainly, for the legal system to serve the needs of a complex and changing society, the basic assumptions, doctrines, and procedures require periodic re-examination in light of changes in societal values and objectives.

The title notwithstanding, *Law and Psychology in Conflict* is a clear and emphatic plea for greater collaboration between law and social and behavioral sciences. This would include further joint research designed to bring about needed improvements in the functioning of our legal institutions.



Those that do teach young babes do it with gentle means and easy tasks.

—SHAKESPEARE



The Real Jung?

E. A. Bennet

What Jung Really Said. New York: Schocken, 1966. Pp. 186. \$4.00.

Reviewed by RICHARD I. EVANS

The author, E. A. Bennet, is a British psychiatrist who is considered by many as the Dean of Jungian Analysts in Great Britain. He lectures at the Institute of Psychiatry, London University, on psychopathology and psychotherapy, including analytical psychology. He was a personal friend of Jung's for many years.

Richard I. Evans, the reviewer, is professor of psychology, University of Houston, and coordinator of the social psychology-personality theory program. His PhD is from Michigan State University and he has taught there and at the University of Tennessee. He is doing a National Science Foundation-supported series of filmed teaching dialogues with notable contributors to psychology that have resulted in the books, *Dialogue with Erich Fromm*, *Dialogue with Erik Erikson* and *Conversations with Carl Jung* and *Reactions from Ernest Jones*, and a forthcoming *Dialogue with B. F. Skinner*. He is also author with Peter Leppmann of *Resistance to Innovation in Higher Education*.

ALMOST from the beginning, Carl Jung's lack of a systematic exposition of his approach to personality as well as his vast range of discourse has tended to discourage many American psychologists from giving him a good first-hand reading. As a result, discussion of Jung, if they are indeed included in psychology courses, have often been based on secondary sources. In recent years, some excellent secondary sources directed at psychology students have been available.

The unfortunate title of this volume, which is after all still another secondary source, suggests that this is the final word on Jung, thus superseding both Jung's own writings as well as other sources. Actually, in the text, author Bennet is more modest. He promises to

attempt no more than to correct some of the misinterpretations of Jung's writings in the process of presenting an introduction to them.

The book consists of a highly condensed, often fragmentary representation of the thousands of words which Jung the psychologist, physician, metaphysician, and philosopher included in his collected works. Bennet includes, in addition to some historical observations of Jung's career, brief interpretations of Jung's discussions of psychological types, unconscious mental activity, dreams, the inner world of the individual, hypnosis, the complex in treatment, transference, alchemy, the confirmation of the unconscious, the undiscovered self, the personality as a whole, and the individuation process.

A KIND of defensiveness is apparent as the author strives to clarify certain areas of misunderstanding or ambiguity in Jung's writing. This clarification is attempted by citing excerpts from Jung's original writings or the author's own correspondence or experiences with him. Bennet pictures Jung as unusually open-minded and perfectly aware of the difference between speculations and truths, a view not held by many of his critics. Also present are interesting descriptions of many of Jung's specific constructs and their source. For example, we are told that Jung developed his notion of introversion-extraversion as a reaction to the difference between Freud and Adler; that in discussing the source of archetypes, Jung was not inalterably committed to the quasi-Lamarckian interpretation which has engendered such criticism.

To be sure, as a life-long friend of Jung's and advocate of Jungian thought, author Bennet was hardly likely to present Jung's concepts in the critical context in which most American psychologists would regard them. However, the author did miss an opportunity to communicate more effectively to psychology and Mowrer could be related to Jung's ideas to the interests of some contemporary psychologists. For example, the recent work of Allport, Maslow, Rogers,

and Mowrer could be related to Jung's concept of individuation in quite a provocative manner. Perhaps the most unfortunate characteristic of the book is its style. It varies from smooth exposition when Bennet interprets and clarifies in his own words, to a disconcerting unevenness as he introduces quotations from Jung's original works.

However, overlooking the pretentious title, the obvious bias of the author, and its lapses in style, this book is an interesting and responsible effort to interpret to the reader some of the feel and flavor of the writings of Carl Jung.

Myths and Dreams about Death

Edgar Herzog. English translation
by David Cox and Eugene Rolfe

Psyche and Death: Archaic Myths and Modern Dreams in Analytical Psychology. New York: Putnam, for the C. G. Jung Foundation for Analytical Psychology, 1967. Pp. 224. \$6.50.

Reviewed by ROBERT A. JOHNSON

The author, Edgar Herzog, studied history and psychology in his native Germany and was a lecturer and psychologist in Berlin before the war. Since 1946 he has lived in Munich where he is a lecturer at the Institute for Psychological Research and Psychotherapy. The present English translation is the work of Eugene Rolfe, author of The Intelligent Agnostic's Introduction to Christianity and David Cox, author of Jung and St. Paul.

The reviewer, Robert A. Johnson, is President, St. John's House, Inc., a philanthropic organization attempting to bridge psychological and religious thought. He studied at the C. G. Jung Institute in Zurich, and later in London.

He is a psychotherapist working mainly with priests, Seminarians, and religious people.

PROFESSOR HERZOG, lecturer for Psychological Research and Psychotherapy in Munich, Germany, has given us a poetic and scholarly book on a subject often shunned in our time. Dr. Carl Jung, after whose work this book is patterned, once commented, "we should accomplish . . . our death." *Psyche and Death* goes far to acquaint us with this art.

The book is valuable for the psychotherapist who will find unpublished and little-known myth material as well as a wealth of examples of and comments on the dream experiences of modern patients in psychotherapy as they touch upon the life-death polarity. It is of equal interest to the religious scholar who will find a sympathetic exposition of Biblical, oriental and pagan material on death. Every man concerns himself with death consciously or unconsciously and will find warmth and inspiration from this book.

Psyche and Death is cast in two parts. The first gives mythological material from many times and societies concerning attitudes toward death. This ranges from primitive myths of the flight from death, as the "nameless horror," the vision of death as an animal killer, man himself as a killer partaking in the numinous experience of giving and taking life and finally death as the fulfillment of life and an aspect of God.

The second part of the book presents fifty-six dreams of patients under analytical treatment as they struggle to come to terms with death and its meaning. The earlier outlined mythological material is vividly portrayed in the life of modern people and one sees the development from fear of death to an acceptance of it as a life experience. "Here we see once more how light shines out of Death upon Life, and that only the man who is prepared in his soul to pass through the 'Gate of death' becomes a living human being."

Professor Herzog makes illuminating comments on the state of the primitive death myth and imagery in the German

unconscious. He observes that the archaic, prechristian imagery of death was not assimilated into the Christian ethos and remains to this day in its early form as customs involving 'Frau Percht' or 'Frau Holle,' death images

begging for assimilation and development.

The etymological research offered throughout the book is most valuable.

The translation by David Cox and Eugene Rolfe is excellent.

as hours spent traveling to-and-from work, off-hour study to upgrade job skills, do-it-yourself household projects, volunteer work for non-profit organizations, and housework and child care. They demonstrate that these various types of unpaid but economically productive hours contribute significantly to our standard of living. If, as it is now the case, these productive activities were to be included in the national accounting scheme, there would have been an increase in our Gross National Product of almost 40% for the year 1964.

The study also shows that well over half of the family heads under age 65 did paid work for more than the legal standard 40 hours a week—mainly as overtime on their regular jobs. This trend toward a more-than-standard work week is especially strong for people with low incomes who, as a group, are motivated to work considerably more than 40 hours a week in exchange for a higher standard of living. The same tendency to put in long hours is also found for self-employed business men and for farmers—two groups that have a high degree of personal control over their hours of income-producing work.

THE main thrust of the study, however, is analytic rather than descriptive. Most of the book is devoted to multivariate causal analyses designed to show how various time allocation decisions are affected by the pressures and constraints of circumstances on the one hand, and by psychological variables such as aspiration level, social participation, attitude toward caution, and resistance to change on the other. The economist-authors are obviously quite fascinated with these psychological variables and believe very strongly in their importance as determinants of productive activity in the American population.

However, an examination of the tables presented in this book would lead us to a quite different conclusion. The results of the various highly elaborate computer analyses show that gross environmental pressures, opportunities, and constraints—as indicated by variables such as age, education, and family

Psychological Economics An Adolescent Discipline

James N. Morgan, Ismail A. Sirageldin, and Nancy Baerwaldt

Productive Americans: A Study of How Individuals Contribute to Economic Progress. (Survey Research Center, Monograph No. 40.) Ann Arbor, Michigan: University of Michigan, 1966. Pp. vi + 546. \$5.00.

Reviewed by ROBERT S. LEE

The first author, James N. Morgan, received his PhD in economics from Harvard University in 1947. He is a Program Director at the Survey Research Center and Professor of Economics at the University of Michigan. He is author of numerous books on consumer economics and has conducted studies of the economic behavior of both the affluent and the poor. The two junior authors are graduate students in the department of economics. Ismail Sirageldin, who has his dissertation almost ready, plans to spend the next two years in Pakistan on the Johns Hopkins family planning project staff. Nancy Baerwaldt, who has an assistantship in research, after getting her degree, plans to continue work in the field of survey research methodology as applied to economic problems.

The reviewer, Robert S. Lee, is currently involved in research in the area of educational technology at IBM. Before this, he was in charge of communications research at IBM Corporate Headquarters. He formerly held various positions at the Psychological Corporation, Columbia University, New York University, and the U. S. Bureau of the Census. His PhD is in social psychology,

taken at NYU under Isidor Chein. He is interested in the use of psychological measurement in mass surveys and has conducted national studies on attitudes toward technological change and toward electronic computers. He is a co-author of *The Road to H—* a book on delinquency, narcotics, and social policy.

THE BOOK, *Productive Americans*, is a study by economists who have discovered psychology. Working in the tradition of George Katona and David McClelland, the authors are convinced that economic behavior is strongly influenced by people's attitudes, values, and motives. In this book, they make use of these concepts in an ambitious attempt to understand how the American population comes to allocate its available time to activities that contribute to the nation's economic productivity.

The study makes important contributions at the descriptive level in portraying where our productive man-hours are going. The authors do not confine themselves simply to time spent at work for pay but, in their carefully conducted survey, go well beyond this to cover other economically productive time such

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T. Ayllon and N. Azrin, Reinforcement sampling: a technique for increasing the behavior of mental patients.

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circumstances—are vastly more important as determinants of productive time-allocation than are the psychological variables. The data would have us believe that conditions and circumstances are what matter here, and that attitudes and motives play a very minor role in affecting how people allocate their time.

Curiously, while the data would have us believe this, the authors would not. This finding, which is of critical significance to their major thesis about the importance of psychological factors, is simply not recognized by them even though it is readily visible in the data they present. Despite the results in their tables, Morgan and his colleagues appear to remain unshaken in their conviction about the significance of the attitudinal-motivational variables. Their belief on this score is apparent in the final summary statement the authors make in the last paragraph of the book, where they write that the composite index of motivational and attitudinal factors "... was an important variable in explaining total productive effort even after allowing for basic constraints and opportunity factors ..." (p. 359). Such a conclusion is clearly contradicted by data presented earlier (p. 195) which shows that the attitudinal index to which they refer actually accounts for less than one-half of one per cent of the total sum of squares of the dependent variable question.

THE notion that psychological factors are of little significance is as uncongenial to this psychologist reviewer as it evidently is to the economists who conducted the study. How then can we account for the statistical results? It should be pointed out that the authors make use of a rather unusual two-stage scheme in their attempt at causal analysis. First, they account for a given dependent variable in terms of circumstantial factors—then, and only then, do they bring in attitudinal and motivational factors to see the extent to which these so-called discretionary variables account for residual variation. Analytic priority is therefore given to demographic characteristics. In this framework, motives and attitudes are only *allowed* to have

an effect over and above the effect of circumstantial factors. Other investigators may well have chosen to examine attitudes and motives first as likely immediate determinants of behavior. They then might have examined circumstance data in an attempt to account for how these attitudes came about.

The important point here is that any analytic scheme employed in such a study involves built-in assumptions about the nature of causality in human behavior. This is particularly true for 'one-shot' survey studies where the distinction between independent, dependent, and intervening variables is often an imposed and arbitrary one. To their credit, the authors, in their interpretive discussion, clearly recognize the complex interplay that can exist between psychological factors and circumstances. It is unfortunate that they were unable to face the issue squarely in terms of their data analysis—there they depended heavily on a fixed computerized schema that incorporates within itself an inadequate model of causal relationships in human behavior.

In summary, *Productive Americans* will surely be an important reference volume for economists, demographers and others who are interested in descriptive information on problems of national productivity and labor statistics. Psychologists, however, are likely to be disappointed.



Dangerousness is not necessarily a function of malicious intent. If I were painting a portrait of the father of evil, I wonder if I wouldn't give him the face of a high-minded fool.

—WALLACE STEGNER



Madness: In the Eye of the Beholder

Thomas J. Scheff

Being Mentally Ill: A Sociological Theory. Chicago: Aldine, 1966. Pp. viii + 210. \$5.75.

Reviewed by DAVID L. ROSENHAN

The author, since 1964, has been Associate Professor in the Department of Sociology, University of California, Santa Barbara. He is editor of a volume entitled *Mental Illness and Social Process* and is currently working on a book concerning the problems of intersubjectivity. He is also Associate Editor of the *American Sociological Review* and a consultant to Camarillo State Hospital.

David L. Rosenhan, the reviewer, received a 1958 PhD from Columbia University. He has taught at Haverford College and the University of Pennsylvania and is currently Research Psychologist, Personality and Social Behavior Research Group, Center for Psychological Studies, Educational Testing Service, and lecturer with the rank of Associate Professor at Princeton. He is author and co-editor with Perry London of *Foundations of Abnormal Psychology* and has an edited volume, again with London, *Theory and Research in Abnormal Psychology*, in press. His current research is in the development and perception of charitable and altruistic behaviors, and, more generally, on the implications of affect and cognition for behavior.

BEAUTY, we know, exists in the eye of the beholder. But what of madness? Is it possible that a profitable conceptualization of madness can emerge from the examination, not of the mad, as both psychoanalysts and learning theorists have done, but of those who call them mad? Thomas Scheff's provocative thesis holds, in part, that madness is like beauty: both reside in the eye of the beholder. He brings the "new" sociology of Erving Goffman and Howard Becker forcefully to bear on the relations between the judged and the judges, between the insane and those

who call them so. Moreover, he presents some well considered research to support his theory.

Scheff's arguments are often subtle and difficult to summarize, but they are well worth the effort, provided the effort tempts the reader to examine the book. He begins with an analysis of rules, and points out that by far most rules are unnamed social conventions, or "residual" rules. Residual rule-breaking is an individual act that arises from many sources and that is quite widespread. Deviance or mental illness, however, is a label that the observing public attaches to some rule-breakers. All of us break rules, but relatively few of us are deemed mentally ill. Most rule-breaking is "denied": that is, it is viewed as transitory and insignificant and it goes unlabeled. But some is labeled "deviance" or "mental illness" and primarily because it is so labeled (and *not* because of factors residing in the individual) the rule-breaker embarks upon a career of mental illness.

THE residual rule-breaker, now labeled deviant, knows a good deal about madness and insanity, as we call it. He has been exposed to the stereotypes of craziness from his earliest youth, and the odd mannerisms of the insane are daily reaffirmed to him through various media as they are to all of us. The roles of insanity, in short, are well-known aspects of that social institution. Moreover, the labeled deviant is rewarded for playing his role "properly" (as when the patient has an "insight" about his illness that confirms his psychotherapist's belief) and punished for attempting more conventional roles (as when a former mental patient seeks a job—a former heart patient has it much easier). Finally, "in the crisis when a residual rule-breaker is publicly labeled, the deviant is highly suggestible, and may accept the proffered role of the insane as the only alternative." In short, people not only behave as they are expected to behave, but come to believe that those are the only behaviors of which they are capable; their behaviors are, as it were, stably ordained by society.

Being Mentally Ill challenges some of the most widely held assumptions in be-

havior science. It does so in a serious manner, by formulating a theory in terms of nine testable propositions, by bringing to bear considerable scholarly breadth, by preferring the modest to the flamboyant statement. It deserves to be widely read and, if read, will be widely discussed if only because it is hard to dismiss. It is not yet a complete theory: it fails to account for single episodes of madness, or for choice of symptomatology and, for this reader, for the affective and hallucinatory psychoses. And it is marred by some writing that could have benefited considerably from redraft. But it is nevertheless stimulating and provocative, potentially of great scientific merit and empirical utility.

Efficient Psychotherapy: A Guide or Only a Goal?

E. Lakin Phillips and Daniel N. Wiener

Short-Term Psychotherapy and Structured Behavior Change.
New York: McGraw-Hill, 1966.
Pp. xi + 244. \$7.95.

Reviewed by CHARLES B. TRUAX

Both authors, E. Lakin Phillips and Daniel N. Wiener have PhD's from the University of Minnesota. Wiener is still there as Associate Professor of Clinical Psychology. He is co-author with Stieper of *Dimensions of Psychotherapy*. Phillips is now Professor and Director of Testing and Counseling Center, George Washington University.

Charles B. Truax, the reviewer, is currently Research Director of the Arkansas Rehabilitation Research and Training Center and Associate Professor, University of Arkansas. He received his

PhD from the University of Wisconsin in 1960. Prior to that he served as staff psychologist for two years at Mendota State Hospital. He received the 1966-67 Research Award from the American Rehabilitation Counseling Association. He is senior author with Robert R. Carkhuff of *Toward Effective Counseling and Psychotherapy* and junior author and editor with Carl R. Rogers of *The Therapeutic Relationship and Its Impact*.

PHILLIPS AND WIENER state as their goal: "how to make psychotherapy more efficient." The first part of the book offers abundant references both to significant lines of research and to major innovations in behavioristic techniques. This makes valuable reading. Their emphasis upon time-limited therapy is within the current *Zeitgeist* and is supported by research evidence. However, they write as if the effective conditions were many, varied, and *obviously known*: that what is needed is the determination or 'will' on the part of the therapist to use these effective conditions in an action-oriented and time-limited fashion.

The strength of the book derives from their view of an effective therapist as a totally flexible activist willing to try to change any behavior using any procedure that appears effective; the great weakness is that they do not present specific procedures likely to induce patient behavior change.

In support of their approach, they devote a chapter to four studies which they claim are outstanding in the literature. Two of the studies are on traditional time-limited therapy and so not relevant to their approach of *structured* therapy. Both of the two studies of short-term structured therapy have severe limitations (including very small numbers of patients), and the findings are not convincing. Thus, in the study by Phillips *et al* (1964) one wonders why grades were not studied on the total of fifty-three patients instead of on only the thirty-nine patients who had complete pre- and post-psychological testing. Grades obviously were available from the registrar on all patients. Even so, short term structured group

therapy (eleven patients) was the only procedure showing significant increases in grades.

The other study, reported by Batrawi (1964), compared structured therapy to non-directive therapy; findings suggested the superiority of their structured approach. However, the therapists were apparently committed to the latter technique and had antipathy to a non-directive approach so that the description sounds like client-centered therapy 'with the brains knocked out.' Even so, their non-directive therapy resulted in greater change in personality dimensions and self-ideal concept congruence.

Despite a lack of convincing evidence for structured short-term therapy, the authors continually criticize and denigrate traditional therapeutic approaches and results. They boldly claim a vast superiority for short-term structured therapy. Much of their criticism of traditional psychotherapy is totally undocumented: simply bold, flat assertions.

The authors devote a full chapter to describing "writing therapy" which their own evidence suggests has no positive beneficial effects on grades (nor did individual short-term structured therapy). Disappointingly, rules for developing therapeutic programs are not discussed, beyond saying that effective programs will "suggest themselves to therapists taking an interest in this activity" (p. 122).

WHAT is their short-term structured behavior therapy? Beyond the generalizations that the 'architect of change' is trained in behavior therapy or cybernetics, the reader is at a loss to understand specifically *what* knowledge is being applied *how* to the *art* of inducing behavior change. It becomes increasingly clear that they have formulated no specific rules for applying existing broad behavioral theories to the specific job of inducing behavior change. They mostly rely on "... the therapist's resourcefulness in structuring events that will lead to the desired behavioral change."

Their presentation of cybernetics was disappointing: it is unfortunate that no new treatment approaches are presented

by Phillips and Wiener which flow directly from it.

After reading their chapter on societal change this reviewer would heartily agree with the authors that "the enormous benefits to social functioning can barely be envisioned" (p. 204). Especially in emphasizing the "barely."

In summary the book is strong on viewpoint but weak on the specifics of therapeutic practice. All in all, this book is well written and of considerable interest as a programmatic viewpoint which correctly argues that therapists can be more effective by concentrating on specific problem behaviors and on patient change in behavior rather than on change in internal dimensions; it redirects attention from 'mental illness' to 'unprofitable behavior.'

But, if a therapist wishes to know how to *practice* behavioristic therapy, he would learn more of the specifics by reading such contributors as Wolpe (1958), Wolpe and Lazarus (1966), Bandura (1961, 1966), Ayllon (1963), Semans (1956) and the growing body of techniques and case reports reported in the several journals devoted to behavioristic therapies.

Behavior in Public Administration

Robert Presthus

Behavioral Approaches to Public Administration. University, Ala.: University of Alabama Press, 1965. Pp. 158. \$3.95.

Reviewed by JOHN MORRIS

The author, Robert V. Presthus, received his PhD in political and social science from the University of Chicago in 1948. He has taught at Southern California, Michigan State, Cornell and the University of Oregon and is at present at York University, Toronto. He is a vigorous proponent of the behavioral approach to political science and public administration. He is author

of The Organizational Society and of Men at the Top.

The reviewer, John F. Morris, is Senior Lecturer in Psychology and Director of Studies, The Management Course, at the University of Manchester Business School. He was originally trained in sociology at the London School of Economics and later in counseling at the University of Chicago Orthogenic School. He worked in Department of Psychology at Manchester before moving in 1966 to newly founded Business School. He has written on adolescent values, social values, management selection, and is co-editor with E. A. Lunzer of Development in Learning.

THIS short, readable book is based on a series of lectures given by Professor Presthus at the University of Alabama in 1964. The lectures were part of a regional training program in administration, and no previous knowledge of behavioral approaches to administration could be assumed. The psychologist is able, therefore, to skip about a quarter of the book, since the author develops a series of familiar points on the advantages of a systematic empirical approach to the human behavior which constitutes a great deal of administration.

The main interest of the book lies in the clear and moderately detailed accounts of research conducted by Presthus in two small American communities and two large British corporations. The community-studies focus on the central power-structures, and the relationship between community leadership and organizational effectiveness. In studying the former theme, Presthus examines the relative merits of two methods of assessing a person's power in the community: his reputation as an influential person among his fellow citizens and his actual participation in significant decisions. Even in these small towns, the power structure is complex. As one might expect, the data gained from the two methods overlap to a marked extent, but nevertheless reveal differences that make it worthwhile to use them both. This move towards using methods that reveal a finer texture in

political and economic relationships will obviously be welcomed by the psychologist.

Again, it is gratifying to see an attempt to resolve disputes between 'elitist' and 'pluralist' schools of thought by setting up dimensions, and searching for measures of variables such as participation in decision-making, knowledge of local politics, and degree of interest in political matters. There is a clear recognition of the limited generality of the research findings, combined with an attempt to place the findings in an appropriate theoretical context. On the other hand, it is somewhat disturbing on occasion to find a gulf between the implications of a concept and the actual research measures ('alienation,' for example, is assessed by responses to 4 items).

THE community surveys also offer an opportunity for an examination of factors entering into the organizational effectiveness of local hospitals. It is clearly shown that the community with the most effective hospital provides a significantly greater degree and range of community support, particularly in the higher levels of the power structure.

The third study moves to a different administrative field—the management of two large British corporations, one private, the other publicly-owned. Apparently British corporations were much less ready to co-operate in behavioral research than their American counterparts. Even in the two corporations that took part in the survey of managerial attitudes and attributes, there is a more 'liberal' critical attitude than in comparable American management, and much less willingness to bow to organizational control of one's activities.

Contrary to hypothesis, the more successful executives were less anxious and more independent of superiors than the less successful. They also tended to be higher in social-class background, and more characterized by certain authoritarian values (though, as usual, the concept of authoritarianism raises puzzling questions that demand a closer analysis than is given here).

The book makes its case for the use-

Dr. Lederer writes:

"Of all the concerns that occupy men's minds, the relationship between the sexes is the most basic and important; and also the most intricate, perplexing, and elusive. In our Western culture, men have seen women variously as charming or boring, as busy home-makers or emancipated discontents, as inspiring or castrating; but throughout, and in spite of everything, still basically and always as 'the weaker sex.' Western man has, in fact, so solidly sold himself on being superior, that he can take great pride in granting women 'equality': a magnanimous pretense, implying that she is inferior to man, but that she can be helped to his level—presumably because she will never become a true competition or threat.

"And yet—in the unashamed privacy of our consulting rooms we do from time to time, see strong men fret, and hear them talk of women with dread and horror and awe, as if women, far from being timid creatures to be patronized, were powerful as the sea and inescapable as fate.

"A lawyer races his sports-car home, lest his wife accuse him of dawdling. A pilot cannot get married, because he is nauseated by womanish toilet smells which recall his mother's sanitary napkins. A student shudders at the hair on his girl's arms. A full-sized man has nightmares that his wife, in bed, will roll on him and crush him. One professor complains that he can never understand his wife, nor predict what she will do next; another suffers from what he feels to be his wife's superior and dominant practical efficiency. Some men cannot resist extra-marital seductions, others cannot seduce their own wives. So it goes. So, and in a thousand other ways. Man, confronted by woman, does seem to feel, variously, frightened, revolted, dominated, bewildered and even, at times, superfluous.

"Nor is any of this incompatible with what he also feels, and feels no less: the love, the devotion and the dependence. Rather is it so that, in a complicated interaction and feedback, the positive and the negative feelings keep reinforcing each other. This precarious oscillation between love and fear will constitute the burden of the following pages; and because the aspect of fear has so generally been suppressed in our culture (though not in its individual members) it is the fear, and its vicissitudes in history, which will be stressed. It will be demonstrated how its denial, like the denial of any strong emotion, gave rise to varied psychopathology; and it shall be the thesis of this book that greater awareness of such denial is therapeutically indicated—awareness of its denial and repression in the patient as well as in the therapist."

THE FEAR OF WOMEN

By Wolfgang Lederer, M.D.

368 Pages, 32 Illus., \$12.50

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fulness of behavioral approaches to the study of public administration. It also provides a valuable opportunity for beginning psychologists to see how familiar approaches and concepts fare in a rather unfamiliar region.

A Drop in Dropouts?

Davis S. Johnson and Edwin B. Hutchins

Doctor or Dropout? A Study of Medical Student Attrition. Evanston, Ill.: Association of American Medical Colleges, 1966. Pp. 173. \$2.00 paper; \$4.00 cloth.

Reviewed by LINDSEY R. HARMON

Both authors, Davis S. Johnson and Edwin B. Hutchins, are on the research staff of the Division of Education of the Association of American Medical Colleges. Johnson (PhD Columbia, 1951) is Assistant Director for Student Studies and Services, and Hutchins (PhD, Illinois, 1958) is Assistant Director for Basic Research. Both have a background of college and university teaching, and both have had experience with Army personnel psychology.

The reviewer, Lindsey R. Harmon, is Director of Research in the Office of Scientific Personnel of the National Research Council. His PhD is from Minnesota, and his career, like that of the authors, has been concerned with counseling, military psychology, and scientific personnel. Currently he is concerned with research on postdoctoral education and with the training of biomedical scientists.

By the standards of any other profession, medicine is a signal success in its program of educating doctors. The dropout rate from medical school is only a fraction of that in law, engineering, or nursing, for example. But a 10% dropout rate is far from perfection, and Johnson and Hutchins make

a convincing case for the need to improve the situation. The cost to the country is high, estimated at a yearly cost of about 650 physicians, and anywhere from \$3½ to \$14 million. The slim little volume *Doctor or Dropout*, which was first published as a special issue of the *Journal of Medical Education* in December, 1966, examines the situation in detail and in depth, and offers prescriptions for improvement.

During the 1920's, the medical school dropout rate was reasonably good, by the standards of most professions, being only about 20% to 25% per year. Efforts were made to improve it, however, and psychologists will remember the Moss Medical Aptitude Test as one of the earliest systematic efforts at improvement of selection of candidates for professional schools. Another factor, during the 1930's and continuing through the World War II period, was a very favorable selection ratio. By 1949, the dropout rate had declined to about 5%, which is probably about as close to zero as is healthy. (Some dropouts from training as physicians become researchers in the basic medical sciences, for example.) But from 1950 the dropout rate climbed rather steadily to over 10% in 1958. This climb provided much of the impetus to the present study.

Most dropout studies focus primarily, if not exclusively, on characteristics of students as causative factors. The present study, however, goes far beyond this, examining also such things as general social and historical trends, conditions in the medical schools, and the interactions of students, faculty, and administration. The result is a balance and depth of analysis that lends an unusual degree of credibility to the prescriptions for cure.

The meticulous care with which the evidence is assembled and its various strands dissected sets a standard for personnel psychologists which is not likely soon to be exceeded. A careful survey of the literature is attested by the very adequate bibliography at the end of each chapter. The authors also had available a wealth of data provided by the individual records of all medical school entrants from 1949 on: 108,000 longi-

tudinal histories in machine record form, containing data on transfers, repetition of courses, measures of success in school, and reasons for dropping out for those who did not succeed. For predictive studies, these records also contained test scores and interest and personality assessments. Not content with this mine of data, the authors also followed up by questionnaire all the 1961-62 dropouts and students making irregular progress, and for control purposes, a 10% sample of students making normal progress. They also queried the deans and student-affairs officers of the medical schools, and followed this up with personal visits to a number of schools, to get a clearer and more integrated picture of how the parts fit together in dynamic patterns.

This wealth of basic data permitted analysis in terms of academic and non-academic reasons for dropping out, and validation of the predictors within each category of reason. Predictors here included not only the several portions of the Medical College Aptitude Test, but such factors as age, school of origin, and family background elements. The characteristics and atmosphere of the medical school were also examined; this analysis incidentally laid to rest the easy explanation that faculty concern for research led to a high dropout rate: those schools with a high research emphasis had lower dropout rates. As a scientific and scholarly report, this little book is excellent. Text tables are adequate, graphs clear if not spectacular, and a 62-page appendix presents further detail for the researcher who wants to dig deeper.

With all this analysis, the prescription for improvement is carefully and conservatively stated. One might almost criticize the prescription for being too restrained, until a careful reading shows that this is a restraint of language rather than of substance. The call for improvements, with some very specific suggestions, is quite clear. For the health of the country, as well as that of medical education, one may hope that it will be heard and acted upon.

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Was This Trip Really Necessary?

Grace de Laguna

On Existence and the Human World. New Haven, Conn.: Yale University Press, 1966. Pp. x + 267. \$6.50.

Reviewed by EDITH WEISSKOPF-JOELSON

The author, Grace de Laguna, is Professor Emeritus of Philosophy, Bryn Mawr College. She was President of the American Philosophical Association, Eastern Division in 1941 and is author of *Speech: Its Function and Development*.

The reviewer, Edith Weisskopf-Joelson, is Professor of Psychology, University of Georgia. She has taught at Purdue and at Duke University. She has her ABEPP diploma in clinical psychology and is on the editorial staffs of *Journal of Perceptual and Motor Skills* and *Existential Psychiatry*. She is co-author with Else Frenkel-Brunswick of *Wunsch und Pflicht*.

THIS is a book written predominantly for philosophers by a philosopher. Its value does not depend on its evaluation by psychologists. Since *CP* is a psychological journal, however, it would seem appropriate to discuss the book from a psychological viewpoint. But such a review might easily turn out to be a false negative which, in the reviewer's opinion, constitutes a more serious mistake than a false positive.

It is the purpose of the book to contribute to a metaphysics embracing the world of nature and the world of man which is a part of nature and yet transcends nature. This metaphysics should reconcile the biological aspects of man with his specifically human aspects.

In the prologue, the author connects and simultaneously distinguishes the inorganic world, the organic world of

nature, and that part of the world of man which transcends nature. These three worlds have come into existence through successive evolution. All three are end-directed or "teleonomic" (p. 3). The inorganic world is directed towards the end of the maintenance of individual entities, the organic world towards the end of reproduction, and the transcendent world of men towards ends beyond . . . "self-preservation and beyond the production and preservation of their offspring" (p. 20). ". . . it is man alone who will die 'for the ashes of his fathers and the altars of his gods'" (p. 21). As opposed to inorganic objects and subhuman organisms, man can choose the ends towards which he directs his life.

One of the main thoughts in this treatise is that potentialities are a factor, or an aspect, of the existent. "Whatever exists, let us admit, is at once actual and potential" (p. 36). Actualities and potentialities are characteristics of individuals, whereby the term individual is used for inorganic objects, subhuman organisms, and humans.

The actualization of potentialities depends on specific conditions, for example, on the actualization of potentialities in other individuals. The conditions for the actualization of a potentiality may not be fulfilled; then this potentiality may be thought of as "unrealizable" (p. 60). However, there are basic potentialities which differ from other potentialities insofar as their "actualization constitutes . . . a basic minimum of existence and is the es-

sential condition for the actualization of other potentialities" (p. 62). Such views remind the reviewer of Maslow's hierarchy of needs. On the other hand, "the actualization of some potentialities may preclude the actualization of others" (p. 67). Here the reviewer is reminded of the agony of choice described by existentialist writers: Every potentiality brought to life may result in a death sentence to all alternate potentialities.

CONSIDERATIONS of this kind raise the question "What is the purpose of metaphysics"? The author suggests that "Although the validity of . . . scientific results does not depend on . . . philosophical interpretation of them, this interpretation, and the metaphysical assumptions implied, are scientifically significant in that they tend to influence scientific policy. That it inspires research in certain directions and obstructs it in others, opens the mind to some problems and closes it to others, has been pointed out by scientists themselves" (p. 73). Thus, in the field of psychology, the author's assumption that potentialities are a part of existence might give rise to further theorizing and researching based on the concept of self-realization, and might constitute a philosophical basis for the already existing focus on this concept within the field of Humanistic Psychology. However, this convergence of views is more apparent than real: the concept of self-realization in the field of psychology needs support against the accusation that it is based on the assumption of a potential self which is not observable. But while the author acknowledges that her statement "potentialities are existent" is in disagreement with the views originated during the beginning of modern science in the seventeenth century that "whatever exists in space and time . . . is . . . completely actual" (pp. 29-30), she focuses with greater emphasis on the fact that it is in disagreement with the philosophical view that potentialities belong to the realm of essences. This, however, is a view which is not held within the field of psychology at the present time, at least not explicitly so. Thus, in order to open the mind to some problems and close it to others within

a field of inquiry a metaphysical system would have to address itself to issues which are pertinent to the field of inquiry.

There are two more points of criticism which the reviewer would like to voice. The author frequently commits the error of discussing semantic issues as if they were issues going beyond the use of language. For example: "The hydrogen in our own solar system is combustible; shall we say that the hydrogen in a stellar system devoid of oxygen is also combustible? . . . Or shall we say that the introduction of other chemical elements in such a system endows hydrogen with new emergent properties" (p. 41)? Or "Yet we must recognize that making a choice is not to be identified with making a value judgement. Making a choice involves committing oneself to overt action. A man might judge one house site to be more desirable than another, but unless he takes steps to gain possession of it he has not actually chosen it" (p. 163).

The second point of criticism is that the author is redundant in many of her statements. This is doubtlessly a result of the fact that the book is partially composed of previously published essays and lectures. More thorough editing might have reduced repetitions to a minimum.

AFTER having sincerely empathized with various philosophers who found it difficult to explain the actualization of timeless, eternal essences within the temporal finite world of existence; struggled through a discussion of the relationship between *Existenz* and *Existence*; understood that psychology, and especially cultural anthropology, sets a variety of problems to philosophy; acknowledged that man develops from a merely biological individual to a person by interaction with his cultural world, thus becoming an object to himself while remaining a subject; joined the author in her disagreement with Kant's and Sartre's concepts of freedom; pondered about the assertion that freedom of choice is based on the fact that the customs in the world of culture are normative without forming a single hierarchy of values; learned, with a good

deal of skepticism, that values are potentialities for which the conditions of actualization are not provided in the world of existence; distinguished between man's *Lebenswelt* consisting of his own subjective experiences seen "from within" (p. 218) and his behavioral environment consisting of actions performed by other persons seen "from without" (p. 218); considered the concept of "conceptual imagination" (p. 223), a kind of empathy by which the anthropologist can acquaint himself with the *Lebenswelten* within an alien culture; speculated about the cultural prerequisites for the development of science; followed the argument that "The acceptance of universal moral standards is a necessary condition of ethnological research" (p. 261); arrived at the author's statement that a science of man is impossible without a correlative development of a philosophy which formulates and criticizes its implicit standards and concepts—after all this, the exhausted reviewer is left with one final question, "Was this trip really necessary?"

Early Reading, Boon or Bane?

Dolores Durkin

Children Who Read Early. New York: Teachers College Press, 1966. Pp. xiv + 174. \$4.25.

Reviewed by ANDREW J. BIEMILLER

The author is Dolores Durkin, Professor of Education, University of Illinois. She was formerly associated with the University of California at Berkeley, and more recently served as a Research Associate in the Horace Mann-Lincoln Institute of School Experimentation at Teachers College, Columbia. The research reported here was done at Berkeley and Columbia. She is also author of *Phonics and the Teaching of Reading* and *Phonics Tests for Teachers*.

The reviewer, Andrew J. Biemiller, is Research Assistant, Project Literacy, Cornell University. He has worked for the past three years as a research assistant with Project Literacy, doing laboratory and classroom research on reading. He is writing a PhD thesis on the learning of reading in the first grade. In July of this year he will become Assistant Professor at the Institute of Child Study, University of Toronto.

AMONG the hazards of being a psychologist these days is being asked "Should I teach my child to read"? In an area characterized more by faddism than fact, Dr. Dolores Durkin's book now provides some empirical answers. Given the current public interest in early reading and the high quality of the research reported, this book deserves to become a best-seller within educational and psychological circles.

Durkin set out to answer three questions:

1. How many children learn to read at home, and, as a result, enter first grade already reading?
2. What is the effect of this early ability on a child's future achievement in reading?
3. What factors promote early reading, and what are their implications for school instruction?

Durkin found that about 1% of 5000 Oakland, California, first graders and 3.5% of 4500 New York City first graders were "early readers." Her criterion was the ability to read at least 18 of 37 words frequently appearing in basal series, and to make at least a few correct responses on the Gates primary word and paragraph tests.

Her second question concerned the impact of early reading on later reading performance. She found that children who enter first grade with some reading skill continue to show substantially greater reading skill than comparable non-early readers throughout elementary school. Furthermore, in the Oakland sample this effect appeared, on the basis of a small sample, to be relatively greater for children with low IQ's. Too few low IQ early readers appeared in the New York sample to check this finding.

The conclusions concerning factors promoting early reading are less clear. This question can be broken into several parts. First, do children who learn to read before entering elementary school differ significantly in skills and personality characteristics from those who do not? Second, do their parents differ in any important ways, both in their child rearing practices, and in their backgrounds and personalities? Third, what implications do factors associated with early reading have for reading instruction?

Durkin attempted to answer these questions through interviews of the parents of early readers in the first study. In the second study, early readers and IQ-matched non-early readers were studied. Parent interviews, standardized tests, and teacher ratings were used in the second study. She concluded that early readers did not differ in any significant way from non-early readers. She did find important parent differences. Finally, on the basis of her results, she felt that formal reading instruction could probably be started sooner, and then pursued at a more leisurely rate with a strong emphasis on using the child's interests in reading and writing.

THE REVIEWER is not convinced, on the basis of Durkin's data, that early readers did not differ from comparably bright non-early readers. Durkin based this conclusion on parent descriptions of the child's personality using checklists of descriptive terms, similar teacher ratings, and results from the Bender Gestalt test, and Minnesota Tests of Creative Thinking. But she disregarded behavioral differences reported in her study between early and non-early readers, as well as the probable impact on the development of children of mothers who differ considerably.

Behavior reports indicate that early readers are quiet children, fond of being alone or of playing "quiet games." Another difference was that early readers seem to have been more secure or self-confident, as indicated by greater willingness to start nursery school and elementary school. These differences were

on the order of two to one. They suggest to this reviewer that the early reader differs substantially from the non-early reader.

The mothers of early readers also differed from those of non-early readers in several significant respects. They seemed to find more time to be with their children—to read to them, to observe them, and to help them learn to read. Mothers of non-early readers seemed to be "busier"—to have less time for their children—and were often concerned about "problems" stemming from early reading. In sum, it seems probable that mothers who give time and interest to their children may raise a different kind of child.

DIFFERENCES between early readers and non-early readers have been emphasized in this review as a caveat, that it may be more difficult or even impossible to teach all children reading in the preschool years. Durkin ends her book with the hope that more flexible programs can be developed for kindergarten and first grade. These programs would extend reading training downwards to those who are interested and ready to read at four or five, while providing a worthwhile early primary for those who have learned reading without braving the dangers of skipping grades. These flexibilities would involve raising expectations of potential performance before and during the first grade. A broadening of expectations might also include the possibility that even by first grade, some children are not ready for a full-scale reading program, designed to produce readers at the end of 180 days of instruction. Currently, reading and reading-related activities occupy the lion's share of first grade time. A stretching out of the time devoted to reading instruction over one or two earlier years for many children and one additional year or so for a few children would permit a reduction of this unusual concentration of effort on one skill—a concentration which the normal child may never again encounter in his academic experience.

As a final note, this research has indicated the pitfalls of our tendency to formulate educational doctrines. The doctrine concerning early reading was for many years very clear—the child *must* not learn to read until first grade. Yet in a review of the pre-1958 literature, Durkin was able to find just three empirical studies of early reading and none that examined the impact of early reading in elementary school. Today we see a shift in the opposite direction—some even propose teaching infants to read. But again, almost no research has been conducted to support the new view. Perhaps a little less doctrine and a little more willingness to search for empirical results as the basis of educational policy is in order.

Sociological Perspectives on Sexual Deviance

John H. Gagnon and William Simon (Eds.)

Sexual Deviance. New York: Harper & Row, 1967. Pp. viii + 310. \$3.50.

Reviewed by EDWIN SCHUR

Both editors are Trustees and Senior Research Psychologists at the Institute for Sex Research and members of the Department of Sociology at Indiana University. Gagnon is co-author of the Institute's publication, *Sex Offenders*, and both have contributed papers to a variety of journals. Their most recent activities cover studies of American youth, homosexuality, and the effects of sex education.

The reviewer, Edwin M. Schur, is Professor and Chairman of the Department of Sociology, Tufts University. His special interest is in societal reactions to deviance. He is author of *Narcotic Addiction in Britain and America: The Impact of Public Policy, Crimes without Victims, and Law and Society*:

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A Sociological View. *He is currently serving as a member of the NIMH Task Force on Homosexuality.*

UNTIL recently most studies of sexual deviance were grounded in the assumption that the individuals engaging in such behavior did so because of underlying psychopathology. As in the case of many kinds of deviant behavior, sexually deviant behavior was seen as merely a symptom, and clinical evidence was regarded as the best source for an understanding of causation. Sociologists early recognized the deficiencies in studying samples of patients or incarcerated individuals, but nonetheless frequently accepted these as the best available sources of data. And often they continued to believe that a comparison of the characteristics (social as well as psychological) of known deviants and non-deviants would fully explain the deviant behavior.

More recently in the sociology of deviance, attention has been shifting away from the individual deviant to the processes of societal reaction to deviance—both on the broad cultural level and on the level of interpersonal relations. Increasingly researchers are asking why society defines particular behaviors as deviant, what broad social conditions give rise to particular forms of deviance, and what interaction processes are involved in an individual's coming to be defined by others as deviant and coming to view himself in this way. The volume under review is informed by this sociocultural perspective, and illustrates nicely the significant contribution sociology has to make in the analysis of deviant sexual behavior.

THE EDITORS suggest three basic types of sexual deviance: 1) "normal deviance"—behavior so widespread and/or socially useful and with such low social visibility, that no real effort is made to control it (e.g., masturbation); 2) "pathological deviance" (e.g., incest) and 3) "those kinds of behavior that generate specific forms of social structure" (e.g., female prostitution, homosexuality). Focusing their book on the third category only, the editors first

provide a broad overview—including articles on childhood sexuality and sexual learning (Gagnon), the marginal status of the adolescent (Reiss), and rationales for attempting to control sexual behavior through criminal law (Wheeler). There follow three papers on prostitution and five on homosexuality.

A central theme pervading these articles is that psychological predisposition proves inadequate to explain comprehensively the situations and behavior of the individuals studied. As James Bryan finds in "Apprenticeships in Prostitution," the occupation of call girl shares with other occupations the need for an apprenticeship period, allowing socialization to a special value system as well as the learning of specific skills (in this case those required to establish a clientele, rather than sexual skills as such). And Evelyn Hooker notes of the homosexual, that "once an individual enters the community, and begins to enter into its round of activities, he is subject to the beliefs, understandings, and norms of that world." Other points emphasized in the book are that an individual is never *only* a deviant, that some individuals engaging in deviant behavior are not defined by peers or selves as deviant (see Reiss's excellent paper on delinquent-homosexual contacts), and that laws relating to deviance may themselves be a partial determinant of certain aspects of the behavior they seek to control.

While it was not possible in a small volume of this sort to provide comprehensive treatment of either prostitution or homosexuality, the editors have selected materials judiciously and have added perceptive comments of their own (including a thoughtful original paper on Lesbianism). The book is a fine contribution to the effort to examine deviance as it exists in the community, and without the restrictive focus sometimes provided by preconceived causal theories. Psychologists should find it challenging and useful.



Morality, British Style

E. M. and M. Eppel

Adolescents and Morality: A Study of Some Moral Values and Dilemmas of Working Adolescents in the Context of a Changing Climate of Opinion. London: Routledge & Kegan Paul; New York: Humanities Press, 1966. Pp. xiii + 254 + 13. \$6.00.

Reviewed by BOYD R. McCANDLESS

The Eppels, E. M. and M., are a husband and wife team. He has been lecturer in the London School of Economics for many years and has also been associated with the National Institute for Social Work Training and the Youth Studies Foundation since they were founded. He is now Senior Lecturer in Developmental and Educational Psychology at the University of Sussex. Mrs. Eppel has had a similar career and is now Lecturer in Social Studies at Sussex.

The reviewer, Boyd R. McCandless, is Professor and Director of the Educational Psychology Doctoral Program at Emory University. He is an Iowa PhD and has worked both in a clinical and research capacity with adolescents, has been a father to three of them, and has taught them via undergraduate courses for many years. He has written a text about children and adolescents and is now writing exclusively on adolescents.

THIS book, essentially a research report, is a rather refreshing and reassuring minor work. The study employs incomplete sentences covering some of the major dimensions of "attitudes, values and dilemmas of the young workers." The young workers are between 15 and 18 years of age, and are products of the British 11+ system who have gone the trade school route and begun work at about 15. Approximately half are girls, half boys. Essays about models are also used as a research technique, and a questionnaire employed

by Havighurst and Taba is given both to "the young workers" and to a comparison group of 100 British adults attending summer school. Comparative results are presented. Additionally, part of the sample was questioned about what they would consider to be good behavior for people of their age, and who would be likely to approve of the actions mentioned. Finally, the Rosenzweig Picture-Frustration Study was administered.

All results are presented by descriptive statistics, frequently without even so much as conversion to percentages.

Perhaps the greatest value of the study is that it tells us something about a population concerning which very little is known: out-of-school, working class youth. They emerge remarkably sound morally, rather toughly realistic (much more so than the comparatively smug and strait-laced sounding U. S. high school respondents measured by Havighurst and Taba), and distressingly extra-punitive on the Rosenzweig.

THE British youth were quite thing-centered; valued friendship for support rather than the more abstract quality of "intimacy"; the boys were more materialistic than the girls and were quite frank about not minding a little petty dishonesty if it helped them out; both the boys and girls were largely relativistic rather than absolutistic in their moral standards; and on the whole they suggest by their responses that "there'll always be an England."

As a setting for the results, a (very poorly sampled) set of adults was questioned about the moral standards of youth. They sound, if anything, much more stuffy and out-of-touch with British youth than would be a comparable sample of U. S. "experts." Magistrates, probation officers, and youth leaders composed the British sample, and the last named seemed to be the least realistically in touch with the youth whom they were presumably leading.

The book can be quickly read, and is worth the reading time for applied workers with youth, whether they be British or from the United States. The book is pleasantly unpretentious. From

his experience (this is a most subjective statement) the reviewer believes the British youngsters in the sample are rather more mature, realistic, and honest than a sample of U. S. youngsters of the same ages, whether in or out of school, would be. At such ages, this is not necessarily a 'good' thing, of course.

An MR Sampler

George A. Jervis (Ed.)

Mental Retardation: A Symposium. Springfield, Ill.: Thomas, 1967. Pp. viii + 248. \$9.75.

Reviewed by GEORGE W. PAULSON

The editor, George A. Jervis, has joint degrees in psychology and medicine, and is Director of Research for the New York State Department of Mental Hygiene and Clinical Professor at Columbia's College of Physicians and Surgeons. He is one of a few men who have made fundamental scientific contributions while working in a public institution—Letchworth.

The reviewer, George Paulson, is Associate Professor of Medicine (Neurology), Ohio State University Medical School. He was trained in clinical neurology, with particular research interests in developmental neurology and cerebral edema. He maintains an active interest in mental hospitals as neurologic consultant at the Columbus State Training School. He is biased toward organic rather than behavioral research, and is interested in physical rather than psychological theories of mental function.

THE BOOK, *Mental Retardation*, with George Jervis as editor, is the report of the 1963 Joseph P. Kennedy, Jr. Foundation Symposium on Retardation. This reviewer cannot cheerfully criticize the products of a foundation that crystallized vague international idealism into specific approaches to the

retarded child, and that supported the reviewer for one entire academic year. It has to be said, however, that other than the general theme of retardation and of support by the Foundation, there is not a unitary focus for the discussions. It is true, however, that studies in retardation often involve numerous disciplines and occur at departmental interfaces, providing one of the attractive features of work in this area. As one of the contributors to this volume implies, research in retardation may not only overlap departments, but also markedly broadens the study of normal learning phenomena.

Several of the authors are particularly interested in summing up, and enthusiastically point to the future of their particular specialty. This intertwining of hope and fact is made palatable by the prominence of the speakers. The genetics section is presented by international leaders in the field, including Penrose, Carr, and Lejeune. Specific biochemical defects are discussed by equally prominent individuals, including Efron, the Mosers, and J. E. Menkes. The single article on viruses emphasizes the explosive re-awakening of interest in this area, particularly regarding prenatal infections and "slow viruses." Psychological, behavioral, and educational studies are contributed by Rosvold, Kirk, and Ross. Conspicuously omitted from the reports here, but covered in later symposia, is the recent work in prenatal nutrition, social and cultural causes for retardation, changes in administrative medicine; and much pertinent work in behavioral phenomena is also not touched upon here.

CARR'S data have confirmed what most obstetricians had long suspected, that a significant percentage of spontaneous abortions are associated with an anomalous abortus and should be a cause for medical research and maternal relief, but not for heroic efforts to prevent miscarriage. Lejeune summarizes one of the newer chromosomal defects, the *cri du chat*, so named from the distinctive cry of these hypotonic and physically small children who have loss of a portion of chromosome 4 or 5.

As with all other gross chromosomal defects, these children are mentally retarded, since "generally speaking human intelligence is the top speed of the living thing." Therefore, as Lejeune states, any abnormality of the genetic code tends to wreck the machinery and reduce the speed.

A hint of the numerous ways in which a single genetic abnormality can actually involve the CNS is shown in Waisman's and Gerntsen's report on homocystinuria. In this newly described aminoaciduria not only does a primary mental retardation occur, but the patients have visual problems due to subluxated lenses, characteristically are afflicted with repeated strokes from thromboembolic disease, and as if that were not enough, may also develop brain damage secondary to convulsions.

Much of the data presented by Rosvold is disappointingly old, but as with Ross's article those readers (such as this reviewer) who are not knowledgeable in the field can find a comfortable sample of another discipline's offerings.

This published series includes an opportunity for the discussants to indicate limitations in research in this area, as well as to show new directions. In this respect the psychologic work is particularly disappointing as far as new insights. For example, one of the primary suggestions noted is "Broadly based research in neuro-psychological sciences can contribute to an understanding of the perplexing problems of mental retardation." This was presumably already evident to the Foundation.

This book serves as a monument, by no means an adequate or complete one, for the Kennedy Foundation and the Kennedy Scholars. The time has come when numerous monographs and symposia on more specific topics than mental retardation will begin to appear, and these will be more useful. Many specific problems in retardation, including hyperactivity, nutrition, behavioral training, speech therapy, aminoacidurias, specific toxic agents already warrant at least a symposium or volume of their own. Nevertheless, for now, and for those readers or libraries who like lucidly presented samples of research from

varied disciplines, this volume is a suitable commemoration of the work of experts and of the Foundation which assisted in their support.

A Closer Look at the VA Hospital

Leonard P. Ullmann

Institution and Outcome: A Comparative Study of Psychiatric Hospitals. New York: Pergamon Press, 1967. Pp. xvi + 197. \$7.50.

Reviewed by SAUL M. SIEGEL

The author, Leonard Ullmann, received his PhD in 1955 from Stanford University. For seven years he was Coordinator of the Psychiatric Evaluation Project (PEP) at the VA Hospital, Palo Alto. He is currently Professor of Psychology at the University of Illinois, and best known for his writings on behavior modification, including the two volumes recently edited with Leonard Krasner, Case Studies in Behavior Modification and Research in Behavior Modification.

The reviewer, Saul M. Siegel, received his PhD from the University of Buffalo, also in 1955. He spent ten years at Topeka State Hospital, the last seven as its chief psychologist. After a year in private practice, he became Professor and Director of Clinical Training at Ohio State University. He recently co-authored with Nick Colarelli Ward H: An Adventure in Innovation.

THIS SMALL BOOK is the report of one research study—an empirical-statistical comparison of 30 Veterans Administration Psychiatric Hospitals. The three stated objectives of this volume are: (1) to evaluate the correlation between various hospital characteristics and the effectiveness with which hospitals return psychiatric pa-

tients to the community; (2) to extend psychological methods (both statistical and social reinforcement analysis) from the context of individual actions to relationships in an organizational context; and (3) to provide a service for patients, staff, and the taxpayers of this country.

The bulk of this work is related to its first objective, and the specific hypothesis that is investigated is that small size and high staffing will be favorably associated with the effectiveness of a psychiatric hospital. For the purposes of the study, the two criteria of effectiveness are first, the percentage of newly admitted schizophrenic patients who are returned to the community for at least 90 days within 274 calendar days after admission (early release); and second, the percentage of patients remaining in the hospital two or more years (long hospitalization). Ullmann verified this hypothesis by finding, in fact, that small size and high staffing were favorably associated with effectiveness. Refining the data, however, allowed for a more differential finding, in that small size was found to be associated with a high percentage of early release of patients, while staffing was found to be more associated with a low percentage of patients with long hospitalization.

Ullmann carefully details a series of additional analysis, and comes up with some other interesting associations. For example, he finds that under general administration expenses, the percentage of total per diem costs allocated for Registrar costs was significantly and favorably associated with early release. (Registrar costs include money spent for ward clinical services, medical record standards, patient benefit eligibility, and the like.) On the other hand, there was a trend for a high percentage of total per diem costs spent by Personnel to be associated with a low percentage of early release. (Personnel costs include orienting and promoting employees, wage administration, and employee-management relations.) He further explores effectiveness of the psychiatric institutions as related to such factors as costs for food and shelter, and the relative sizes of the professional and subprofessional staffs.

In his discussion of the psychiatric hospital as an organization, and his suggestions for improving this organization the author involves himself in a variety of areas not specifically related to his findings. For example, he cites the problem of the funding of the Veterans Administration Hospitals and the philosophy behind this funding, i.e., the custodial care of the patient. He also deals with certain bureaucratic elements of these institutions including the problems of dual supervision, problems of organizational hierarchy, and those related to policies and procedures and division of labor. This material is excellent of itself and certainly fleshes out an otherwise dull discourse on statistical procedures.

In addition to the ending chapters that deal with problems of mental hospitals in perspective and the implications of his findings, Ullmann intersperses his empirical analysis with literature reviews on the size of working groups and organizations other than psychiatric hospitals, an historical review on the size of psychiatric hospitals, and a critical review of the PEP—Psychiatric Evaluation Project of the VA that stimulated this study. Much of this material is superfluous.

In terms of the author's primary objective of evaluating the relationship between hospital characteristics and their effectiveness, the author adds a significant study to the growing body of literature on the mental hospital. There are times when the inferences that he draws from his data lead him to contradictory suggestions, as for example, at one point recommending the use of heterogeneous wards, and at another time, suggesting increased staffing on chronic wards. But these instances are few, and for the most part the data speak loudly, and the recommendations are sound. Perhaps this and similar works suggest that there should be a new "joint commission" for the purpose of thoroughly looking at the problems of Veterans Administration Psychiatric Hospitals, and considering recommendations such as those made by Ullmann. This could conceivably result in a very

thorough shaking up of the Veterans Administration Hospital system. Certainly there are many voices, including this reviewer's, who believe that such a shake-up is long past due.

As might be expected, Ullmann views the work that he has done from the point of view of social reinforcement. While it is difficult to object to social reinforcement as a way of viewing institutional behavior and phenomena, such an approach does not really seem to add significantly to the understanding of the data that is presented. On the other hand, the sophisticated methodological approach used to look empirically at institutions is commendable and promises great potential for the emerging discipline of social systems innovation and change.

Despite the fact that the title of this book pretentiously promises a more encompassing study than it delivers, the work is important. It should force the Veterans Administration to take a closer look at its psychiatric institutions. Hopefully, it will also open this kind of research to other psychologists interested in that peculiar phenomenon, the mental hospital.

Lemur Lore

Alison Jolly

Lemur Behavior: A Madagascar Field Study. Chicago: University of Chicago, 1966. Pp. xiii + 187. \$6.95.

Reviewed by WILLIAM A. MASON

The author, Alison Jolly, received her PhD from Yale, where she worked with R. J. Andrew and J. Buettner-Janusch. She made her first acquaintance with lemurs in the laboratory and has published several papers on the way they use their hands and on their problem-solving abilities. She is currently at Cambridge University.

The reviewer, William A. Mason, is Professor of Psychology and Head, Be-

havioral Sciences Division, Delta Regional Primate Research Center, Tulane University. He received his PhD in 1954 from Stanford University; since then his research has been concerned with the behavior of monkeys and apes. His experience includes a two-year field study of South American monkeys.

CONSIDER the following as a sentence completion test: "Although natural history has lost in popularity, it still retains for its practitioners a strong fascination and it must continue to remain one of the prime sources of knowledge and insight for the modern" Chances are that whatever the word you chose, it wasn't 'psychologist.' The correct word, in fact, is 'ecologist,' and the statement was made in 1955 by Thomas Park.

Psychology has never had much interest in natural history, of course, and certainly has never regarded it as a prime source of insight and knowledge. There is nothing surprising about this. Psychology's first concern is and always has been man, and the higher forms of human behavior have traditionally occupied stage center. Animals got into the act fairly late, and then chiefly because they were more useful than people for certain kinds of research. What an animal did outside normal working hours in the Y-maze, the Skinner box, or the WGTA was its own affair.

If this describes your attitude toward animal behavior, you will find little of professional interest in *Lemur Behavior*. It is a behavioral field study in the classic tradition, which means that it aims to give as full an account as possible of what the subject species does under natural conditions—what it eats and when, where it travels and how far, how it deals with predators and prey, whether it lives alone or in groups, and how it manages to conceive and to care for its young.

There is a sizable literature in this genre and in recent years no animals have received more attention than the primates. *Lemur Behavior* is an important addition to this effort. By any standards, it is a first rate field study—as lucid, thorough, and balanced a presentation as one can reasonably ex-

pect. These are substantial merits, essential to the high quality of the book; its peculiar value, however, derives from the species studied.

The lemurs of Madagascar are an isolated and unusual group. Although they are bona fide primates, they lack many of the distinctions that we tend to associate with members of this order: They don't look like monkeys or apes, but—with their pointed furry ears, sharp faces, and moist muzzles—more like foxes or raccoons. Their brains are simple by monkey norms; they lack the impressive manual skills we expect to find in primates; and by ordinary standards, they are not too bright.

As this would imply, they are not, in fact, very close relatives of man, their ancestors and ours having diverged long before the evolution of the New World monkeys, and the line of Old World primates that gave rise to apes and man. This very remoteness, however, is what makes the lemurs especially interesting: "Lemurs . . . provide a third, independent evolutionary line to compare with the New World and Old World lines of social primates. Where the three lines resemble each other we may find clues to the origin and nature of primate social bonds." Although the book does not make a very strong effort to spell out these clues, this is not its first concern, and it provides enough solid descriptive material—on postures, expressive movements, social structure, sex, and maternal behavior—to allow the reader to make his own hypotheses and form his own conclusions.



How, indeed, can we speak of perceiving an event, when, at any given moment, part of the event has in the past, dissolved and gone forever, whereas the rest has yet to happen, and all we have to work with is memory, anticipation, and a tissue-thin instant of present time.

—CHURCH



BRFLY NTD

DOMINIQUE BARRUCAND. *Histoire de l'Hypnose en France*. Paris: Presses Universitaires de France, 1967. Pp. 236. 12 F.

In this detailed and well documented book Barrucand covers the history of hypnosis in France from the introduction of Mesmer's notions of animal magnetism in the late 18th century through the work of the Schools of Nancy and Salpêtrière in the latter part of the 19th century up to the work of Janet in the first decades of the present century. The focus is upon the theories and techniques of hypnosis and the personalities of the participants in the movement. The interacting social forces are, to a large extent, ignored. In short, it is a scholarly but rather dry history of the vicissitudes of hypnotism in France from the 18th to the 20th century.

DAVID ELKIND

AARON T. BECK, M.D. *Depression: Clinical, Experimental, and Theoretical Aspects*. New York: Hoeber Medical Division, Harper and Row, 1967. Pp. 384. \$10.50.

As the title implies, this volume deals entirely with depression, not only as a clinical syndrome, but also as an accompanying symptom of other primary disorders. The book includes representative studies drawn from the literature of "clinical, biological, psychological, theoretical, and therapeutic aspects of depression." In addition, the author presents the results of a five-year research project in which more than 1,000 patients were studied. This volume should be a welcome addition to the clinician's library and a reference source for graduate students studying psychopathology.

I. JAY KNOFF

FRANKLIN E. FRAZIER. With an Introduction by ST. CLAIR DRAKE. *Negro Youth at the Crossways: Their Personality Development in the Middle States*. (Prepared for The American Youth Commission, American Council on Education.) New York: Schocken Books, 1940. (First Schocken Edition, 1967) Pp. xxv + 299. \$2.45 paper, \$6.50 cloth.

A re-issue in paperback of a prophetic 1940 volume by a distinguished sociologist whose penetrating analyses livened the race relations literature for over a generation. Negro youth were at the crossroads in 1940 at the start of World War II. The path they have trod during the past twenty-eight years has continually made headlines. Consequently, this volume offers an interesting opportunity to check how social science can predict the broad outlines of the future.

THOMAS F. PEITIGREW

ERNEST HARMS. With a Foreword by FRANCIS J. BRACELAND, M.D. *Origins of Modern Psychiatry*. Springfield, Ill.: Thomas, 1967. Pp. xiv + 256. \$7.75.

This is a volume concerned with the history of "mental healing" which includes a scholarly account of the contributions of well-known, as well as obscure, writers. The close personal association between the author and C. G. Jung is reflected in the significance Harms places on his contributions. Harms also includes a brief history of child psychiatry, which typically has been omitted in previous writings. CP readers interested in the history of psychiatry as interpreted by the fresh insights of Harms should find this volume attractive.

I. JAY KNOFF

C. L. HEREFORD, and L. NATALICIO (Eds.) *Aportaciones de la Psicología a la Investigación Transcultural*. Mexico City: Editorial Trillas, 1967. Pp. 474.

This book contains the Proceedings of the X Interamerican Congress of Psychology, held in Lima, Peru, on April 1-7, 1966. Some papers are in English, others in Spanish and in Portuguese. The book contains 94 articles, the program of activities, and the inaugural speech.

The contributions to the Congress are divided into Symposia, Workshops, and Individual Papers. The Symposia are probably the most important part, and deal with topics such as: The Inter-university Project for Behavioral Science, Cross-cultural Studies of Personality, New Roles for Psychologists in Community Mental Health, a Multidisciplinary Approach to Minimal Brain Dysfunction in Children, Language and Behavior, etc.

RUBEN ARDILA

JOOST A. M. MEERLOO. *Unobtrusive Communication: Essays in Psycholinguistics*. The Netherlands: Van Gorcum, 1964. Pp. 198.

The series of essays deals a little with the many roles of language in the therapeutic situation, and a lot with bodily responses of all sorts (even including skin eruptions) as messages. Most of the book is concerned with contagious responses (e.g., you yawn, I yawn). Meerloo's thesis is: when people observe body messages that approach the archaic (=rudimentary remnants of animal signals), they tend to regress and therefore to imitate. All this is "unobtrusive"; we are not aware of all the dances we join. This line of reasoning is generalized, quite without reason, to all responses to symbols. Some often interesting observations looking for a reason to be. Syntacticians; stay away!

DONALD J. FOSS

ROSS L. MOONEY and TAHER A. RAZIK (Eds.) *Explorations in Creativity*. New York: Harper and Row, 1967. Pp. x + 338. \$10.00.

This collection of 26 papers presents the reader with an interesting cross-section

of thought and finding from the rapidly expanding literature on creativity. Three broad sections, Nature, Nurture and Measurement, cover widely ranging topics: "biological roots," creative attitudes, personological and intellectual characteristics of creative persons, important environmental factors, development of creative talent, development and use in various settings and for different age groups of tests of creativity, and interactions of relevant dimensions for creative behavior and performance, to name a few. Many significant contributors to the literature on creativity are included in the volume (e.g., Guilford, C. W. Taylor, and Torrance), but other equally significant authors are not (e.g., Anderson, May, Roe, and Rogers).

The book's usefulness is lessened by the publisher's or editors' omissions of proper citation of sources for selections, errors reprinted in the text, and by combination of the references from all articles into one list—with numerous errors.

WALLACE B. HALL

RISTO NÄÄTÄNEN. *Selective Attention and Evoked Potentials*. Helsinki: Suomalainen Tiedekatemia, 1967. Pp. 226.

This monograph from the University of Helsinki is based on experimental work carried out at UCLA. The studies confirm that evoked potentials are enhanced by relevant stimuli. The enhancement is attributed to an increase in anticipatory and preparatory arousal, rather than to a process of selective attention. Although attentive states are accompanied by increased arousal and activity, the author specifically rejects the hypothesis that evoked potentials can be influenced by the selectivity or the direction of the attentive states.

The volume is illustrated by numerous tracings of evoked potentials. The exposition is especially clear and well written.

S. S. STEVENS

CARL R. ROGERS and BARRY STEVENS. With contributions from EUGENE T. GENDLIN, JOHN M. SHLIEN, and WILSON VAN DUSEN. *Person to Person:*

The Problem of Being Human: A New Trend in Psychology. Walnut Creek, Calif.: Real People Press, 1967. Pp. 276. \$3.00.

Although this paperback brings together previously published papers by Rogers, Gendlin, and Van Dusen, it is quite unlike the typical edited compilation. What makes this book unusual and fascinating is the writing of Barry Stevens, who reacts to the papers from her own unique and very human point of view. Her responses are not commentaries or reviews of the papers, but idiosyncratic feelings and thoughts which the papers evoke in her and which, in turn, tend to goad the reader into seeing what he can derive from the papers. This very unconventional book makes for interesting and stimulating reading.

I. JAY KNOFF

PER SAUGSTAD. *An Inquiry into the Foundations of Psychology*. New York: Bedminster Press, 1966. Pp. 103. \$4.00.

This monograph attempts to resolve certain philosophical problems associated with behavioristic and phenomenological approaches to psychology. The book focuses on the problems of perception and cognition, and interactions of these functions with learning.

MELVIN MARX

DAVID STAFFORD-CLARK. *What Freud Really Said*. New York: Schocken, 1966. Pp. 260. \$4.50.

This is a brief introduction to Freud's writings. Essentially it is a summary of the major texts, and in view of the magnitude of the task (Freud, we learn, wrote over three-and-a-half million words), it is very well done indeed. The author's stance is in general expository rather than evaluative, though he does fuss a bit about Freud's views on religion and culture. The early writings (pre-1920) are given more weight and space than the later contributions, leading to some neglect of ego and superego theory; but this is probably a quibble. All in all, a good and useful book which does what it sets out to do.

JOSEPH ADELSON

The Fifteen-Minute Hour

Ronald R. Koegler and Norman Q. Brill

Treatment of Psychiatric Outpatients. New York: Appleton-Century-Crofts, 1967. Pp. xvii + 223. \$6.95.

George J. Wayne and Ronald R. Koegler (Eds.)

Emergency Psychiatry and Brief Therapy. Boston: Little, Brown, 1966. Pp. xiv + 218. (International Psychiatry Clinics, Winter, 1966, Vol. 3, No. 4. \$18.50 per year.)

Reviewed by ARTHUR N. WIENS

Ronald R. Koegler, author of the first book and editor of the second, is Research Psychiatrist in the Department of Psychiatry at UCLA and Director of the Frederick Douglass Child Development Center in Los Angeles. Norman Q. Brill, author of the first book, is Professor of Psychiatry, University of California School of Medicine, Los Angeles. Formerly he was Chairman of the Department of Psychiatry, UCLA, and Medical Director, The Neuropsychiatric Institute, UCLA Center for the Health Sciences. George J. Wayne, editor of the second book, is Clinical Professor, Department of Psychiatry, UCLA, and Medical Director of the Edgemont Hospital in Los Angeles.

The reviewer, Arthur N. Wiens, is Professor in the Department of Medical Psychology, University of Oregon Medical School. His PhD is from the University of Portland. His duties at Oregon include directing their clinical psychology predoctoral and postdoctoral training programs as well as directing their Psychology Outpatient Clinic.

INTENSIVE psychotherapy is not the treatment of choice for all psychoneurotic patients. Many patients in psychiatric outpatient clinics are being over-treated. Social class is not related to treatment outcome, but merely to

whether applicants are accepted for clinic treatment. When middle-class therapists become interested in working with patients from lower economic levels they have just as much success with them as they do with middle-class patients. Therapists who are most positive in their attitude toward psychotherapy are no more successful in their therapy than those who are less positive. The above findings as well as many others are reported by Koegler and Brill.

Two-thirds of the pages in this book are devoted to a report of a study carried out at the Neuropsychiatric Institute Outpatient Clinic at UCLA. The study evaluated the effects of Compazine, Miltown, and phenobarbital, as well as placebos, psychotherapy, and no treatment, on Caucasian female patients with personality disorders, psychoneuroses, and other conditions which would ordinarily have been treated by psychotherapy if there had been no limitations on the clinic staff or facilities. The patients who received psychotherapy were seen for fifty minutes one or more times weekly by supervised psychiatric residents. Patients on drugs or placebos were seen by the same residents one to four times a month for fifteen minutes at a time. Patients assigned to the no-treatment group were told they could not be seen immediately; they

were contacted at intervals for re-evaluation. The therapists were told that all drugs were active, and they were not identified.

After five weeks, none of the drugs had proved better than the placebo; patients receiving psychotherapy were more irritable. After ten weeks there were still no significant differences among treatment groups, although there was a tendency for psychotherapy (fifty-minute hour) and Miltown (fifteen-minute hour plus capsule) to be associated with the most improvement. After termination there was further improvement in all groups, so that there were no longer differences among them. On a later follow-up the no-treatment group had caught up with the others. It would appear that for many outpatients the effect of psychiatric treatment is to accelerate improvement that would have occurred in time if they were left to their own devices.

The authors note that the carrying out of this study (44 psychiatrists and 299 patients over a three-year period) involved the entire staff directly or indirectly, and had a profound effect on staff attitudes through the treatment experience of individual therapists with individual patients. The marked improvement of their own patients, theoretically receiving inadequate treatment (treatment bias was in favor of psychoanalytic psychotherapy), forced the residents to re-examine their prejudices about treatment and recognize (albeit often grudgingly) the therapeutic value of briefer clinic contact.

One effect of these changed attitudes was the establishment of Brief Contact Therapy, i.e., the scheduling of three patients within one hour who might or might not receive medication in addition to the brief psychotherapy. The results achieved with this new program were not only comparable to those in the study reported above, but were more impressive because the BCT patients were (on the whole) sicker. With no increase in personnel the caseload had been increased 25 per cent. Perhaps more important, most of this increase had been in types of patients who previously tended not to be accepted for treatment.

THE STRENGTH of this book is also its weakness. The findings noted above, as well as many others, are highly provocative of thought as the authors, with the collaboration of other UCLA faculty, designed and executed an excellent study of the treatment effectiveness of several different procedures. Aspects of this study have been reported in prior papers and several of the chapters in this book are largely based on these earlier reports. The general theme suggested in the title (i.e., treatment of psychiatric patients) is not really so general. Furthermore, when the authors in the last one-third of the book do talk in general terms about the outpatient treatment of a variety of diagnostic groups their discussion becomes doctrinaire and arbitrary. The spirit of inquiry and promise of reconceptualization that appears earlier is not evident in the latter chapters. In fact, their summarizing chapter strikes a sour note as they decry attempts currently being made to use non-psychiatrically trained physicians to handle patients with emotional difficulties, let alone "inadequately trained independent nonmedical therapists." They suggest that psychiatric teams under the direction and leadership of the psychiatrist should be fostered. They also would like medical schools to assume greater responsibility in the training of persons who will constitute these teams, and through this to curtail the development of professions that are more interested in competing than cooperating in treatment. Despite this chauvinism, the observations and the food for thought that derive from their study make this book well worth reading.

WAYNE AND KOEGLER (with the assistance of thirteen additional UCLA faculty members) state that their goal, also, is to meet the need to develop emergency and brief therapy techniques to provide psychiatric services to patients from the lower socio-economic classes.

They emphasize the necessity to break from the tradition that equates psychiatric treatment with psychotherapy,

i.e., "... the psychiatrist of the future will make his most effective contribution as a social scientist, as well as an individual therapist." Anything that enables a psychiatrist to help more people while expending the same amount of time is a positive contribution. Mental health consultation ("the No-Patient hour"), hospital milieu, half-way houses, brief-contact therapy, etc., are all seen as effective, briefer and more catholic approaches to psychiatric problems.

Persons (not necessarily "patients") to be helped include: those whose psychic pain and emotional turbulence increase beyond the urgent stage to become unendurable, i.e., the psychiatric emergency that is independent of any particular diagnostic entity; people who are part of the contemporary revolt of the long-deprived, greatly underprivileged ethnic groups who experience volcanic turbulence in their feeling of life and fear of, or actual loss of, impulse control; children in acute emotional distress; and, culturally and educationally disadvantaged children who require rehabilitation. The authors also devote their often insightful attention in successive chapters of this book to the problem of the psychiatric emergency with adolescents, psychosomatic patients, problem patients in internal medicine, and patients with acute injury as well as the skid-row alcoholic and the depressed and suicidal patient.

Their reconceptualized psychiatrist is expected to evaluate the person in crisis within the framework of his intimate psychodynamic and sociologic situation. He is expected to realize that while individual intrinsic emotional vulnerability is central to crisis proneness, particular environmental triggers are common and must be identified. The therapist then acts as an auxiliary ego to the patient in his regressed panic state. When an emergency exists, the most effective remedy is some demonstrable action by the therapist. Action is much more supportive than words and insights. Therapy must be brisk, vigorous, and directive. In short, the psychiatrist must take charge and direct the patient toward adaptive responses which will relieve extrapsychic as well as intrapsychic stress.

THE CHAPTERS contributed by Koegler are particularly readable, and quotable, prose. In discussing brief contact therapy he laments that the psychiatric patient "sees the doctor for a fixed period of time, regardless of the patient's needs. The patient is stretched or shortened to fit the psychiatrist's Procrustean time-couch." In evaluating the observation that treatment of some kind is more likely to result in a patient feeling better *more quickly* than being placed on a waiting list, he feels that perhaps "... this is all the patient is asking for—a mental cortisone to relieve the inflammation until natural healing takes place." Patients are little concerned with the therapist's views about the etiology of neurotic conflicts, but they are concerned with the personal interaction between themselves and the therapist (e.g., whether he liked me, or, whether he returned my telephone call). Koegler is also quite provocative in such statements as: an "ordinary" psychiatrist can treat children; running water in a playroom is not a necessity in therapy, and almost all of the understanding of a child comes through previous or concurrent talks with the child's mother; psychological testing has little practical value, except when there is a question of brain damage or retardation; a team is not needed inasmuch as the psychiatrist usually sees both child and parents. While the team approach is a helpful teaching device, it has little clinical usefulness.

While the chapters in this book, written by fifteen different authors, are uneven in quality and often redundant in content, they do include many useful clinical, and some research, observations on emergency psychiatric situations and brief therapy(ies). For clinicians, as well as for other persons interested in diverse clinical problems and in the development of expanded helping services, this book is well worth reading. It is near the mainstream of current efforts to develop more particular behavioral assessment and then in turn to more precisely (and effectively and efficiently) intervene to modify specially distressing behavior.

Belief Systems and Institutional Change

David Street, Robert D. Vinter, and Charles Perrow. Foreword by Morris Janowitz

Organization for Treatment: A Comparative Study of Institutions for Delinquents. New York: Free Press, 1966. Pp. xx + 330. \$7.95.

Reviewed by DANA B. HANFORD

All of the authors were associated with the School of Social Work of the University of Michigan at the time of the study. David Street is now Assistant Professor of Sociology and Associate Director of the Center for Social Organization Studies at the University of Chicago. Robert D. Vinter is Professor of Social Work at the University of Michigan. Charles Perrow is Associate Professor in the Graduate School of Public and International Affairs and Senior Research Associate, Department of Sociology, University of Pittsburgh. Morris Janowitz, co-director of the study, is now at the Center for Social Organization Studies at the University of Chicago.

The reviewer, Dana B. Hanford, is Director of Education and Program Development at the Olympic Center for Mental Health and Mental Retardation in Bremerton, Washington. He received his PhD in clinical psychology from the University of Kansas in 1958 and remained in Kansas for a while at the VA Hospital in Topeka and at the University. In 1961 he became involved in a program for planned change at Northern State Hospital in Washington. Since 1965 he and others from that program have shifted their base of operations from the institution to the community, establishing a pilot community center as a state program in Bremerton. His interests are the psychological ecology of treatment settings and planning for community services.

As its subtitle indicates, this book is a report of research comparing the social systems of several different institutions for juvenile offenders. The research examines the contrasting ways each institution is organized according to goals formulated by its executive and the strategies he employs for resolving conflicts and ambiguities arising from the various staff groups within the institution and from external sources (local citizens, courts, state legislatures, and other governing bodies).

The concept of belief systems is introduced as a focal point of the research. The authors assert that, for lack of objective measures of effectiveness, institutions develop differing beliefs about delinquents and how they are to be changed. These beliefs pervade all aspects of the organization, providing criteria, rationales, defenses, and norms for structuring the social relations between staff and inmates so that the organization can implement its goals. Three types of belief systems are represented among the institutions studied: obedience/conformity, re-education/development, and treatment. The research probes the consequences of commitment to each of these sets of beliefs for the attitudes and behaviors of staff and inmates. It also explores "... the conditions under which ... [different types of] organizations can sustain or adapt old models or develop new ones" ... in

responding to increasing demands that juvenile offenders be rehabilitated rather than put away for punishment.

SIX INSTITUTIONS were selected for study: Three were large public institutions, one essentially disciplinary, a second governed according to mixed discipline and treatment goals, and a third committed to milieu treatment; three were small private institutions, one of them oriented to individual treatment, the other two oriented to goals of education and development. The study consisted of two intensive questionnaire surveys of staff and inmates administered a year apart, observations, and interviews. It exemplifies the best in survey research methodology, as the techniques were carefully designed to yield relevant information, and data from the several sources were used to cross-validate one another. Consequently the descriptions of the six institutions are thorough and systematic, and comparisons and contrasts are sharply defined.

The results show clear differences between institutions which relate to the organizational variables of belief systems and executive strategies. The potency of these organizational variables in accounting for differences poses a challenge to two pivotal conceptions commonly held by institution executives: first, that the behavior and attitudes of inmates are a function of their personal attributes; second, that the differences between institutions in resources at their disposal (e.g., level of education and other background attributes of staff) account for differences in ability to achieve the goal of changing behavior. The results also place in perspective the notion of the monolithic character of "total institutions," by delineating some of the differences in inmate behavior and attitudes which stem from an obedience/conformity orientation in contrast to treatment or re-education orientations.

THE chief merit of the book, however, is that it documents the major "organizational requirements" of commitment to different belief systems.

They examine what is needed to implement the three systems and how the organizations representing them pursue their different goals—simply or complexly, surely or vaguely, cheaply or expensively. They give particular attention to the technology derived from each belief system for handling the key problem of structuring the social relations between staff and inmates so that the system works and organizational goals are fulfilled. Technologies provide the means for structuring by giving explanations of the belief system, i.e., concrete, specific expectations of appropriate inmate behavior and definitions of appropriate staff behavior.

From their comparisons of the technologies of the three belief systems it is easy to see why the obedience/conformity model persists in the majority of our institutions despite increasing criticism of its effectiveness in changing delinquents and demands for reform based on humane considerations: its organization requirements are simple and inexpensive to meet, and it offers a strong and clear prescription for ways staff and inmates shall relate to one another. The re-education/development belief system, espousing benign values, also tends toward simplicity, yet its technology fails to provide a forceful counter-proposition to punitive measures. "... it was very difficult for executives ... [at these institutions] to define concrete modes of staff-inmate relations other than in terms of conformity and domination."

In contrast, the treatment model offers a radically different way of viewing the delinquent and how he may be changed, and the authors admit that the treatment institutions excited their sympathy and fascination. Nevertheless, their study reveals a number of problems in effecting a treatment ideology—problems in making delinquency hold still for treatment notions. First, concepts of treatment derived from intrapersonal theories that equate insight with behavior change tend to have vague and confused implications for structuring relations between staff and inmates. Often they promote verbal games whereby the inmate learns that confession equals conformity, hence early release. Second, the view that the de-

linquent is "sick" often leads staff to expect him to behave in erratic, impulsive ways rather than to establish conditions wherein he can progressively demonstrate responsible behavior. Third, the treatment model tends to confine staff perspectives of change processes to events presumed to occur in one-to-one interactions and thereby to hinder their ability to use group methods to foster positive group relations and informal leadership among inmates. The treatment institutions studied were at pains to resolve the tensions created by these problems and managed to operate within their belief systems only with the aid of complex organizational strategies and expensive efforts at system maintenance.

Since this research was done (1960) a number of innovations in treatment concepts have sprung up that promise to rectify many of the conditions criticized by the authors in the institutions they studied. New models have arisen that recast the problem of delinquency in interpersonal or transactional terms and propose technologies for modifying delinquent behavior and promoting responsible behavior by taking into account organizational or setting variables. This is not to say that the findings of this research are dated, for they focus on the very conditions, still prevalent, which new strategies may remedy.

This research does not address what is probably the most crucial question: What happens to inmates from different kinds of institutions after they leave and return to their communities? The juvenile correction field suffers from a scarcity of information from follow-up studies that would provide comparative indices of effectiveness as guidelines for change. While new kinds of service structures are being considered to supplement and eventually replace institutions, there is little reason to doubt that institutions will continue for some time to be major resources for dealing with delinquents. Therefore, the initial improvements are likely to occur as a result of the changes that institutions are able to make within their own programs. The reader who eschews the part-process, patchwork approaches to understanding institutions that focus upon what is wrong with inmates or describe muddled effects of changing single ele-

ments of programs will find in this book some insights deriving from an organizational viewpoint that give direction for planning changes.

Contemporary Comments and Guidance

Edward Landy and Arthur M. Kroll (Eds.)

Guidance in American Education III: Needs and Influencing Forces. Boston: Harvard Graduate School of Education, 1966. Pp. viii + 261. \$4.50.

Reviewed by ROBERT M. WASSON

The first editor is Edward Landy, Assistant Superintendent for Pupil Personnel Services in Newton, Massachusetts, and Professor of Education, Harvard Graduate School of Education. He is co-editor with Perry of Guidance in American Education I and with Kroll of Guidance in American Education II. He has taught at NYU, Montclair State, University of Maine, and University of Vermont. Arthur Kroll, is his administrative assistant and Research Assistant, Harvard Graduate School of Education.

The reviewer, Robert M. Wasson, is Associate Professor of Counselor Education, College of Education, University of Iowa. His PhD is from Wisconsin. He is particularly interested in organizational variables and their effort on pupil personnel specialists (primarily counselors) and how they interpret their role within the institution.

THESE fourteen essays were presented at the third annual institute for pupil personnel administrators sponsored by the Harvard Graduate School of Education. These institutes were designed, in the words of the senior editor and director of the institutes, "To provide an opportunity for busy practi-

tioners . . . to examine the important issues which affect education in America today and in particular how those issues ought to influence their own planning and actions in the field of pupil personnel services" (vii).

One can be relatively confident that the majority of the papers presented evoked considerable contemplation and consideration from those in attendance. For the most part, the presentations are relatively informal reviews of the literature and 'wisdom writing' that do more to pose questions than arrive at strongly supported conclusions—and that is not a bad thing! The pupil personnel field operates far in advance of data upon which its procedures are based and this symposia certainly reflects that condition. Thoughtful considerations that generate testable hypotheses are always welcome.

The level of discourse is perhaps even more variable in this collection than in other similar compendia. Eleven of the presentations were prepared for the institute while three had been previously published elsewhere. This fact combined with the varying degrees of formality employed by the authors in achieving their assignment of stimulating those attending the institute might be expected to result in an uneven publication.

Following both the editorial dictum not to abstract and a need to communicate some indication of the collection's content, the reviewer notes that the 14 papers have been categorized into six sections: Socio-Economic Trends (Max Lerner, Talcott Parsons, Eli Ginzberg, and Thomas Pettigrew); Psychological Issues (Phillip Jackson and Frank Buckley); Testing and Career Development Theory (Henry Dyer and David Tiedeman); Mental Health and the Schools (Eli Bower and Barbara Biber); Contemporary Observations of Guidance Practice (Bud Khleif and Harold Pepinsky); and Policies and Practices in Pupil Personnel Services (Walter Waetjen and Bruce Shear).

In the first two sections, a rather common theme emerges—the need to assist individuals in a search for personal meaning and identity. It is both in-

teresting and disturbing to observe that this need is largely ignored in those papers concerned with the operation of pupil personnel programs. Shear particularly gives secondary emphasis to the role of pupil personnel specialists in the formulation of educational objectives and primary emphasis to supporting the intellectual objectives of the school.

Both Khleif and Waetjen point up, albeit from differing perspectives, school counselors' increasing concern with personal status and the implications flowing from such preoccupations. Of these two papers, Khleif's raises more fundamental questions than does Waetjen's.

Probably the paper with the widest general appeal in this symposium is Pepinsky's "Help-Giving in Search of a Criterion." In a thoughtful and analytical presentation utilizing a conceptual model derived from the field of organizational psychology, Pepinsky argues that the bureaucratization of the help-giving enterprise combined with the crash programs designed to alleviate pressing societal problems have resulted in productivity designed more to reduce managerial anxiety than to provide assistance to persons. In Pepinsky's terms, the consequence is productivity in search of a criterion. Readers of Szasz's work will not be strangers to the theme but should find Pepinsky's analysis useful.

It is doubtful that this volume will be of much interest to those psychologists who do not work rather intimately with the educational enterprise. For those who do, a few hours with the collection will be worthwhile.



*I follow Nature, the best of guides, as
I would a god, and am loyal to her
commands.*

—CICERO



Some Slips Show!

C. M. Lindvall

Measuring Pupil Achievement and Aptitude. New York: Harcourt, Brace & World, 1967. Pp. xi + 188. \$2.25.

Reviewed by DOROTHY C. ADKIN

The author, C. M. Lindvall, is Professor of Education and Associate Director of the Learning Research and Development Center, University of Pittsburgh. Currently his principal work is with a project on individualized prescribed instruction. He is author of *Testing and Evaluation: An Introduction and Defining Educational Objectives*.

The reviewer, Dorothy C. Adkins, is Professor, Department of Educational Psychology and Researcher, Education Research and Development Center College of Education, University of Hawaii. She is also Director of the University of Hawaii Head Start Evaluation and Research Center. She formerly was Professor of Psychology and Chairman of the Department at the University of North Carolina. She has also spent some four years at the University of Chicago and some eight years with the federal government in work closely related to test development. She is author of *Test Construction and Statistics*.

A DECISION to write possibly the only review of a new book that will be routinely available to many members of the American Psychological Association is not to be made lightly. This reviewer at least can claim teaching experience in courses and at the level for which the book is intended—a qualification not always manifest in critics of textbooks.

Lindvall's book has broad coverage, ranging over definition of specific behavioral objectives, construction of test items, a bit of descriptive statistics, derived scores, reliability and validity, standardized tests of achievement and of scholastic aptitude, and related matters. The discerning reader will detect statements that need qualification, rules that are expressed too rigidly, and gaps

that ought to be filled. To call for revision that would attempt to meet all reactions of this type, however, would be to ask for a different book, one not consistent with the author's goal of a brief but comprehensive treatment to complement others.

Tolerant as the prospective user of this book is urged to be with respect to the ongoing matters, certain technical points warrant amendment or further explication. "Validity," "Reliability," "Objectivity," and "Comprehensiveness" as coordinate headings under "Choosing the Evaluation Procedure" can but confuse the reader. Although mention is made of the probability of answering true-false items correctly by guessing, no consideration is given to conditions in which correction for guessing is useless and under which it is essential. Is there caution against application of split-halves and Kuder-Richardson techniques of estimating reliability for repeated tests.

COMPUTATION of the standard deviation and of standard scores is illustrated for six cases, and a class exercise for the standard deviation is given on only five. A hint that ordinarily such computations would not be performed with so few cases and that such statistics are plagued by sampling unreliability would have been in order.

The author implies that underlying characteristics measured by typical tests of aptitude and achievement are normally distributed and that this is why the normal distribution is used for certain types of derived scores. Rather, score distributions are what test constructors make them, and use of normalizing procedures is more a matter of convenience than of assumption.

It is stated that "... if two tests are considered for use, one way of comparing the accuracy with which they measure is to compare their standard errors of measurement" (pp. 111-112). This is an end served by reliability coefficients, not by a statistic that depends on units of measurement of particular tests.

Although the author describes characteristics of centile ranks (which are widely regarded as usually inappropriate

for adding or averaging), his illustration of combining marks on different measures entails the addition of centile ranks.

Observations such as the foregoing can be handled readily by informed instructors. The book deserves trial by those willing to supplement it with needed modifications.

Early Predictions of Reading Disability

Katrina de Hirsch, Jeannette Jefferson Jansky, and William S. Langford

Predicting Reading Failure: A Preliminary Study of Reading, Writing, and Spelling Disabilities in Preschool Children. New York: Harper & Row, 1966. Pp. xv + 144. \$5.95.

Reviewed by ARTHUR E. TRAXLER

The first author, Katrina de Hirsch, holds a degree from the College for Speech Therapists in London. She is Director, Pediatric Language Disorder Clinic, Columbia-Presbyterian Medical Center. The second author, Jeannette J. Jansky, has an MS from the City College of New York and is with the same clinic. The third author, William S. Langford, is Director, Child Psychiatric Services, Columbia-Presbyterian Hospital and Professor in the College of Physicians and Surgeons.

The reviewer, Arthur E. Traxler, is Lecturer in Education, University of Miami, and President Emeritus, Educational Records Bureau, New York City. His PhD is from the University of Chicago. In his youth he was principal and superintendent for various small schools in Kansas. Later he was psychologist and guidance chairman in the University of Chicago High School and he worked for 29 years for the Educational Records Bureau.

THIS is a stimulating book, one that will surely arouse much thinking, discussion, and reappraisal of procedures for identifying potential reading failures and helping young children learn to read. Founded on a theory of neurophysiological development, it undertakes to explain many reading failures on the basis of general maturational lag.

The book is based on a study carried on at the Columbia-Presbyterian Medical Center, New York. The central purpose of the study was to develop for kindergarten use a "Predictive Index" of reading, writing, and spelling failure. The fifty-three subjects were carefully chosen to eliminate certain extraneous factors, such as foreign language background and defects of vision and hearing.

The study is characterized by a number of laudable features: (a) The period between predictive and final testing was relatively long—from the kindergarten to the end of grade two. (b) A larger-than-usual number of initial tests (37 in all), sampling a wide range of perceptuomotor and linguistic abilities, was tried out, from which ten tests were finally chosen for the "Predictive Index." (c) In addition to the regular study group, a group of prematurely born children was studied in order to clarify further the hypothesis that general maturational lag is an important factor in reading failure. (d) In a sense, the book is almost as much preventive as it is predictive. The text concludes with an excellent chapter proposing for immature children a "transition class" of indefinite duration between the kindergarten and grade one. (e) The book is permeated with the insightful observations of the highly clinically and medically trained and experienced authors.

HOWEVER, these admirable features are, in a sense, fringe benefits, since the central purpose of the study was to develop a set of kindergarten measures highly predictive of success in reading and other communication skills. From the viewpoint of theory and technique of measurement, one may question whether this purpose is fully realized.

There is a dearth of statistical information concerning the dependability

and appropriateness of the predictive tests. Lack of reliability data leaves the reader with no basis for inferring whether those tests which did not 'make the team' of ten tests chosen for the Predictive Index lost out because they measured something relatively unimportant or because they were unusually low in reliability, a deficiency which might have been corrected simply by lengthening the tests. It seems probable that several of the tests administered at the kindergarten level were quite low in reliability, since they yielded scores with ranges as low as 0-3.

The over-all score on the Predictive Index chosen by the authors consisted simply of the number of tests each pupil 'passed,' the critical score level being designated as the score which best discriminated between the "failing readers" and the rest of the children. One wonders why this dichotomous treatment of the data was used and whether a combination of the actual score levels reached by each pupil on the various tests would have been more revealing of over-all strengths and weaknesses.

Another possible question concerns the criterion of reading success used at the end of grade two—a combination of the highly respected Gray Oral Reading and Gates Advanced Primary Reading tests. It would have been useful to know whether there were statistical reasons for choosing these particular tests in preference to other primary reading tests and why the authors of this study undertook to weight them equally in the criterion by means of their grade scores. The two tests were standardized on different populations, and it is questionable whether their norms are equivalent. It would also have been helpful to know the rationale for treating oral and silent reading as equally significant indices of reading achievement at the end of grade two.

Nevertheless, the authors of *Predicting Reading Failure* are to be congratulated, not only for their intrepid venturing into a complex field which has perhaps too often been the exclusive habitat of professionals in educational and psychological measurement, but also for their judicious and effective use of the contributions of many other re-

searchers. They wisely designate this book as "a preliminary study" and state that the results are now being validated on a group of 400 children in New York City. It is to be hoped that their validation study, based upon a larger group, independent of the one from which the Predictive Index was derived, as well as the research of others stimulated by this study, may dispel some of the reservations of this reviewer.

Therapist, Heal Thyself!

Rudolf Ekstein

Children of Time and Space, of Action and Impulse: Clinical Studies on the Psychoanalytic Treatment of Severely Disturbed Children. New York: Appleton-Century-Crofts, 1966. Pp. x + 466. \$8.75.

Reviewed by BERNARD RIMLAND

The author-editor, Rudolf Ekstein, is a native of Vienna with a PhD from the University of Vienna and psychoanalytic training from the Psychoanalytic Institute in Vienna. He has been Training Analyst at the Topeka Psychoanalytic Institute and a staff member of The Menninger Foundation. At present he is Director of the Childhood Psychosis Project, Reiss-Davis Child Study Center, Los Angeles. He is also Training Analyst at the Los Angeles Society and Institute for Psychoanalysis and a consultant for the Metropolitan State Hospital, Norwalk, California.

The reviewer, Bernard Rimland, freely admits his bias in favor of biologically and educationally oriented research. He is Director of the Institute for Child Behavior Research as well as Director of the Personnel Measurement

Research Department of the U. S. Naval Personnel Research Activity of San Diego. His PhD is from Pennsylvania State University. He is author of Infantile Autism, winner of the Century Psychology Series Award. He notes that if CP had followed Rimland's recommendations in regard to "conceptual friendliness" (CP., Feb. 1964, 9, ...) he would not be reviewing this book.

THIS BOOK is a collection of 24 loosely connected papers relating to the psychoanalytic approach toward the treatment of mentally ill children. Rudolf Ekstein is author or co-author of all but one paper. Four colleagues shared the authorship of fourteen of the papers, but you can learn who wrote what only by inspecting the footnotes to each chapter. Twenty-one of the 24 papers have previously been published in *Psychoanalytic Study of the Child* and other places, so the book could be titled *Collected Papers of Rudolf Ekstein (and Friends)*.

Most of the chapters fit a very familiar pattern for psychoanalytic papers—in this case selected segments from therapy sessions with child patients who range from severely neurotic teenagers to starkly psychotic youngsters: ("Ted came out from under the table pushing a ball into the room. I said his magic wand was working very well now. It must make him happy. He hit the ball so that it rolled outside the room . . ." p. 70). A major portion of these chapters is devoted to typical psychoanalytic explanations: ("At the same time, the patient may attempt to utilize the grafted strength of this symbiotic relationship to live out magical fantasies of omnipotence and phallic concepts of masculine strength, which will probably lead him to act out what will seem like delinquent manifestations" p. 441). Of more interest to me than the elaborated case material with its dubious and far-fetched interpretations were Ekstein's several literate and thoughtful "think pieces" such as his Chapter 6, "The Nature of the Interpretive Process," or his Chapter 23 on special problems in training child therapists.

This book is disappointing in its utter lack of appreciation and concern for the

highly relevant research on child and adult psychoanalysis which has been published in the past 40 years. Twenty-three years after R. R. Sears's (1943) full review of objective attempts to confirm psychoanalytic theories (negative); seven years after Sigmund H. Orlansky's (1949) summary of research relating child-rearing practices to Freudian predictions (negative); fourteen years after Eysenck's (1952) review of the outcome of psychotherapy with adults and E. E. Levitt's later (1957, 1963) similar review of psychotherapy with children (all negative), we find the authors of the papers in this volume blithely practicing and theorizing about psychoanalysis as they might possibly have been excused for doing 30 years ago. Call me gauche if you will, but as one who knows of families who have spent 40 and 50 thousand dollars (and in one case 85 thousand dollars) in vain on psychoanalysis of their children, I cannot abide by the polite rules that permit psychoanalytic authors the convenience of ignoring (repressing?) the hundreds of empirical studies that belie their beliefs. To ignore the theoretical objections to psychoanalysis is marginal; to ignore the empirical studies is intolerable. At this point the reviewer must become a critic or a superego, or perhaps even a therapist, insisting that the writers face reality, or at least acknowledge it, rather than remain in their dream world where they can pretend that the distasteful empirical research does not exist. Is not the facing of the sometimes unpleasant reality what psychoanalysis is supposed to be about? Therapist, heal thyself!

For those interested in learning what "children of time and space . . ." are really like outside the therapist's office, in appreciating the agony and guilt their parents experience, and in finding out how the therapist appears to the child's parents, let me strongly recommend Jacques May's excellent book about his experiences with his autistic twins, *A Physician Looks at Psychiatry*, (1958, John Day); Swedish Psychologist Karin Junker's fascinating book about her autistic daughter: *The Child in the Glass Ball* (1964, Abingdon), or the

just-published superbly written story of editor Clara Park's autistic daughter, *The Siege* (1967, Harcourt, Brace).

It is to Ekstein's credit that he brings into the open (Chapter 23) the jealousy and hostility that characterize the child therapist's attitude toward his young patient's parents. This is a valid observa-

tion. Who can disagree with Clara Park when she observes in this regard: "Psychotic children are a congregation of mysteries. So little is as yet understood about them that the distinction between amateur and professional has hardly begun to acquire a meaning" (p. 196)? We have much to be humble about.

ON THE OTHER HAND



ESP?

Is *CP* going into the ESP business after all? In the first paragraph of Leibowitz's review (*CP*, Jan. 1968, 13, 4) I find: "The present volume attempts, by presenting a selection of his unwritten publications, to provide. . . ." Is the book full of blank pages whose message one reads in the way one "sees" a picture on the blank card of the TAT? If so, does the method work? It would certainly solve the labor of writing, if it does. Save a lot of trouble in proofreading too.

PAUL A. KOLERS

(There are times when it pays to have two editors. Both of us deny having read Leibowitz's review.—Eds.)

DISTORTED VIEW OF ESP

Dr. Girden's review of Prof. K. Ramakrishna Rao's book *Experimental Parapsychology: A Review and Interpretation*, appearing in the February 1967 issue of *Contemporary Psychology* (p. 95) has just been seen by us. We must confess that our image of American Psychologists, an image of fairmindedness and objectivity has been sadly shattered by the appallingly poor review which seems to believe in the suppression of ideas rather than their discussion. One wonders whether the reviewer had read anything beyond the first chapter and how a review so distorted could find its way into *CP*.

Dr. Girden fails to state the purpose and scope of the book and succeeds only in leaving in the minds of his readers the

false impression that the book is yet another unsuccessful attempt to prove the existence of psi. The purpose of the book is not to review the criticisms of ESP research but "to present brief but systematic reviews of all the experimental reports that have appeared in the last twenty-five years which seem to throw light on the nature of psi phenomena." That Professor Rao has admirably done this is attested by a large number of appreciative reviews appearing around the world.

Dr. Girden's remarks about the author's affiliation was in poor taste. The book, we know, was written and given to the press when Professor Rao was on the staff of the Parapsychology Laboratory of Duke University. It would have been unfair to the Parapsychology Laboratory if he were to give his present affiliation. Any implication that Prof. Rao had chosen his Duke affiliation to gain academic respectability would be malicious and false, since his present position, Professor in and Chairman of the Department of Psychology in a university of high standing, is no less respectable.

MISS B. K. KANTHAMANI
MISS P. SAILAJA
Department of Psychology
Andhra University
Waltair, India

BOOKS RECEIVED

- AUERBACH, ALINE B. *Parents learn through discussion: principles and practices of parent group education*. In cooperation with the Child Study Association of America. New York: Wiley, 1968. Pp. xii + 358. \$7.95.
- BOTTOMORE, T. B. *Classes in modern society*. New York: Vintage Books, 1968 (First copyright, 1966). Pp. 120. \$1.45.
- CARMICHAEL, STOKELY and HAMILTON, CHARLES V. *Black power: the politics of liberation in America*. New York: Vintage Books, 1967. Pp. xii + 198. \$1.95.
- CORNUELLE, RICHARD C. *Reclaiming the American dream*. New York: Vintage Books, 1968 (First copyright, 1965). Pp. xvii + 171. \$1.65.
- CRATTY, BRYANT J. *Psychology and physical activity*. Englewood Cliffs, N. J.: Prentice-Hall, 1968. Pp. x + 214. \$5.95.
- DECONCHY, J. P. *Structure genetique de l'idee de Dieu chez des catholiques francais, garcons et filles de 8 a 16 ans*. Brussels: Editions Lumen Vitae, 1967. Pp. 235.
- DREIKURS, RUDOLF. *Psychology in the classroom: a manual for teachers*. 2nd ed. New York: Harper & Row, 1957, 1968. Pp. xvi + 284. \$3.75.
- FINN, JAMES. *Protest: pacifism and politics; some passionate views on war and nonviolence*. New York: Vintage Books, 1968. Pp. x + 528. \$2.45.
- FRANK, JEROME D. *Sanity and survival: psychological aspects of war and peace*. New York: Vintage Books, 1968. Pp. x + 330. \$1.95.
- HAYDEN, TOM. *Rebellion in Newark: official violence and ghetto response*. New York: Vintage Books, 1967. Pp. 101. \$1.65.
- JÄGER, ADOLF OTTO. *Dimensionen der Intelligenz*. Göttingen: Verlag für Psychologie, Dr. C. J. Hogrefe, 1967. Pp. xi + 421. DM 48,—.
- KENSHALO, DAN R. (Compiled and edited by). *The skin senses*. Proceedings of the First International Symposium on the Skin Senses Held at the Florida State University in Tallahassee, Fla. Springfield, Ill.: Thomas, 1968. Pp. xvii + 636. \$26.00.
- KUMMER, HANS. *Social organization of hamadryas baboons: a field study*. Chicago: Univ. of Chicago Press, 1968. Pp. vi + 189. \$8.95.
- LURIA, A. R. Translated from the Russian by LYNN SOLOTAROFF. With a Foreword by JEROME S. BRUNER. *The mind of a mnemonist: a little book about a vast memory*. New York: Basic Books, 1968. Pp. xi + 160. \$4.95.
- MCDERMOTT, JOHN J. (Edited and with an Introduction by). *The writings of William James: a comprehensive edition; including Annotated bibliography of the writings of William James*. New York: The Modern Library, 1968. Pp. li + 858. \$4.95.
- MCGREGOR, DOUGLAS. WARREN G. BENNIS and EDGAR H. SCHEIN, Eds. With the collaboration of CAROLINE MCGREGOR. *Leadership and motivation: essays of Douglas McGregor*. Cambridge, Mass.: M.I.T. Press, 1968. Pp. xxiii + 286. \$2.95.
- MINOGUE, KENNETH R. *The liberal mind: a critical analysis of the philosophy of liberalism and its political effects*. New York: Vintage Books, 1968 (First copyright, 1963). Pp. vii + 204. \$1.95.
- MORRIS, DESMOND. *The naked ape: a zoologist's study of the human animal*. New York: McGraw-Hill, 1967. Pp. 252. \$5.95.
- NATIONAL RESEARCH COUNCIL. *Communication systems and resources in the behavioral sciences*. A report by the Committee on Information in the Behavioral Sciences Division of the National Research Council. Washington: National Academy of Sciences, 1967. Pp. 67. \$2.50.
- PARTYKA, JOSEPH J. *Never come early: a psychological autobiographical case history in novel form*. 1st ed. Mountain View, Calif.: Partyka, 1968. Pp. vi + 193. \$6.20.
- POWLEDGE, FRED. *To change a child: a report on the institute for developmental studies*. Chicago: Quadrangle Books, 1967. Pp. vii + 110. \$5.50 cloth, \$2.25 paper.
- RAPOPORT, ROBERT N. With the collaboration of RHONA RAPOPORT and IRVING ROSOW. *Community as doctor: new perspectives on a therapeutic community*. London: Social Science Paperbacks, 1960. New York: Barnes & Noble, 1968. Pp. x + 325. \$4.25 paper, \$7.25 cloth.
- REYNOLDS, G. S. *A primer of operant conditioning*. Glenview, Ill.: Scott, Foresman, 1968. Pp. 130. \$3.75.
- SAMPSON, RONALD V. *The psychology of power*. New York: Vintage Books, 1968 (First copyright, 1965). Pp. 247. \$1.95.
- SHULMAN, BERNARD H. *Essays in schizophrenia*. Baltimore: Williams & Wilkins, 1968. Pp. xv + 206. \$8.75.
- SIM, MYRE. *Guide to psychiatry*. 2nd ed. (With a chapter on "Legal Aspects of Psychiatry in the U.S." by John Donnelly) Baltimore: Williams & Wilkins, 1968. Pp. xi + 1055. \$10.50.
- SODDY, KENNETH and KIDSON, MARY C. *Men in middle life*. Based on the Study made by the one-time Scientific Committee of the World Federation for Mental Health. Cross-Cultural Studies in Mental Health. Philadelphia: Lippincott, 1967. Pp. xii + 485. \$12.50.
- SULLIVAN, EDMUND V. *Piaget and the school curriculum—a critical appraisal*. Bulletin #2, 1967. Ontario Institute of Studies in Education. Ontario, Canada: Ontario Institute for Studies in Education, 1967. Pp. 38.
- TORRANCE, E. PAUL. *Minnesota studies in creative behavior: 1958–1966*. Greensboro, N. C.: The Creativity Research Institute of the Richardson Foundation, 1968. Pp. 63.
- WATSON, LELAND A. and TOLAN, THOMAS. *Hearing tests and hearing instruments*. New York: Hafner, 1967 (Facsimile of 1949 ed.) Pp. x + 597. \$13.50.
- WEBB, LESLEY. *Children with special needs in the infants' school*. London: Colin Smythe. New York: Transatlantic Arts, Distributor in U.S., 1967. Pp. 216. \$7.25.
- WEINBURG, S. KIRSON (Ed.) *The sociology of mental disorders: analyses and readings in psychiatric sociology*. Chicago: Aldine, 1967. Pp. xii + 367. \$12.00.
- WEISS, ROBERT S. *Statistics in social research: an introduction*. New York: Wiley, 1968. Pp. vii + 369. \$8.95.
- WOLMAN, BENJAMIN B. (Ed.) *Historical roots of contemporary psychology*. New York: Harper and Row, 1968. Pp. viii + 376. \$11.75.

As the soul and body are two, we see also that there are two parts of the soul, the rational and the irrational, and two corresponding states—reason and appetite. And as the body is prior in order of generation to the soul, so the irrational is prior to the rational. The proof is that anger and wishing and desire are implanted in children from their very birth, but reason and understanding are developed as they grow older. Wherefore, the care of the body ought to precede that of the soul, and the training of the appetitive part should follow: nonetheless our care of it must be for the sake of the reason, and our care of the body for the sake of the soul.

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FILLMORE H. SANFORD

1914-1967

FILL's untimely death last summer shocked his many friends throughout the country. Gardner Lindzey and Janet Spence, with Ann Sanford's devoted and informed help, have taken over the editing of *Contemporary Psychology*. Garry Boring, in *CP SPEAKS* (January, 1968), comments on the loyalty to *CP* represented by this transition. But the time for a memorial note about Fill as a person is long overdue. I was one of several people who went to Austin in August, 1967, to be with the family and to attend his memorial service. The promise to write an obituary was then easy to make, but hard to fulfill in the days that followed; my relation with Fill was deeper and more intense than even I had realized.

Fill was born in Chatham, Virginia, in 1914. He was one of several prominent psychologists who have graduated from the University of Richmond; 1935 was the date of his baccalaureate degree, followed by an MA in 1937 and a PhD in 1941 at Harvard. He was elected to Phi Beta Kappa and Sigma Xi in this period. His own biographical sketch contains this rueful comment on the Richmond experience: "Came to college as the fifth member of the family to attend University of Richmond. One older brother was best student, another best athlete, in the history of the school. Had to beat them both, almost did."

I first knew Fill in that strange collection of psychologists who worked with John G. Jenkins in the aviation psychology program of the Division of Aviation Medicine in the Navy's Bureau of Medicine and Surgery. The *Journal of Abnormal and Social Psychology* (Volume 40, 1945, pp. 255-273) pub-



Fillmore H. Sanford

lished letters from psychologists in military service. Fill wrote the letters from an aviation psychologist (pp. 255-266). He told how it was; how little and how much psychology had to offer in the military setting, and why.

WHEN Jenkins returned to Maryland at the end of World War II, Fill loyally joined him on that faculty, serving as assistant professor from 1946-1948. Fill then went to Haverford for two years, until he succeeded Dael Wolfe as Executive Secretary of the APA in 1950. It was in the six-year period of his service to APA that I came to know him best and was most deeply involved with him in national and professional developments within psychology. Each person who has held the APA job has brought different talents and different emphases;

Fill's tenure served to engage people in APA affairs, to give some sense of calling and commitment, to develop the vision of what psychology might be and might do for men and affairs. To read again, as I have done, his annual reports in *AP* as Executive Secretary and his columns (*Across the Secretary's Desk*) is to hear and see belatedly his vision. But he was no manager or administrator; as the enterprise grew and became more channeled and bureaucratic, his contribution was less meaningful and harder to sustain.

So from APA he went to Cambridge for service as associate director of the Joint Commission on Mental Health and Illness. After a year there, he went as a faculty member to the University of Texas, in 1957.

The excitement and promise of New College, in Sarasota, Florida, appealed to his continuing concern with undergraduate teaching and student interaction. He went there in 1964. For him and for several others, New College failed its promise. Fill and the family moved once more, this time to Macalaster College, in St. Paul. The chance to go back to his beloved Texas came in the spring of 1966; he rejoined that faculty in September, 1966.

Among other assignments for APA, he became Editor of *CP* in January 1962 and was still in his first term at the time of his death. From 1958-1960, he was president of the American Board of Examiners in Professional Psychology. From 1956-1959 he was a member of APA's Policy and Planning Board.

His greatest enthusiasm and his heaviest investment of skill and talent came to be centered in the introductory psychology course; his text had been well received; he had made many video tapes and worked extensively in closed-

circuit and open educational television broadcasting. At the time of his death he was hard at work on an introductory text for junior college use.

It is the work of time to encyst feelings of grief and loss. So it has been with Fill; the summer of 1967 is long since gone. But then, when one could speak from the heart, words came that caught briefly, at least, the abiding affection that many of us felt for the friend we had lost. I close this memorial note with the words I said, at Ann's request, at the memorial service for Fill in Austin on August 8, 1967:

"Fill Sanford died in the place that he loved.

After many years and many travels, he had come home again—home to the people, the place, the school that so deeply engaged him.

The years and the travel had not always been easy. As do all men, he had a dream of himself and for himself. To some of us, on rare occasions, he spoke of his failure to attain the dream. And we could not always make him see how much more wonderful was the reality of his life.

He was, above all else, Malraux's *l'homme engagé*. People mattered; ideas counted; life was to be greatly lived; evil would be destroyed. In a cynical world, these are rare sentiments.

My friend and colleague, Paul Meehl, reminded me Sunday night of the brilliance of Fill's dissertation at Harvard—a pioneer contribution to a then new area of psychology. We here and countless friends elsewhere will often, in the days ahead, be reminded of other facets of Fill's many-sided genius for loving and doing.

A few days ago, Carl Sandburg died. He and Fill had much in common: they were architects, artists, and artisans of words; they were lusty men; men of gigantic humor; believers in other men; they were lovers and men of friendships. We are richer for Fill's presence; our memories of him shall not die."

JOHN G. DARLEY
April, 1968

Insanity: From Abstract Debate to Operational Reality

Abraham S. Goldstein

The Insanity Defense. New Haven/London: Yale University Press, 1967.
Pp. 289. \$6.00 cloth, \$1.95 paper.

Reviewed by FRED COHEN

The author, Abraham S. Goldstein, is Professor of Law, Yale Law School. A graduate of Yale Law School, he also holds an honorary MA from Cambridge University where he was a Visiting Fellow at the Institute of Criminology. He is a member of the Governor's Commission to Revise the Connecticut Criminal Code, and he served as a consultant to the President's Crime Commission.

The reviewer, Fred Cohen, is Professor of Law at the University of Texas, but this academic year he is Visiting Professor of Criminal Justice, State University of New York at Albany, School of Criminal Justice. He has taught criminal law and procedure for six years and has taught a seminar on Mental Illness and the Law to law students and is presently teaching the same subject, on an experimental basis, to students at the S.U.N.Y. Graduate School of Social Welfare.

TO CONFRONT the insanity defense is to confront the essence of criminal law theory. It is the busy intersection for the criminal law's philosophical assumptions, its multiple and often contradictory purposes, its techniques and resources for reaching decisions, its utility as a mechanism for social control.

This is heady stuff and the insanity defense has inspired writers to create exquisite philosophical and psychological theories. Indeed, few subjects concerned with the criminal law have been

debated by medico-legal writers more often or with greater vigor. Its inspirational qualities notwithstanding, statistically the insanity defense is only slightly more significant than the incidence of snake bites in New York City.

Professor Goldstein's stated mission is to delineate the philosophical and pragmatic contradictions and to appraise the defense in operational terms. He pulls together and analyzes the competing philosophies and legal formulae, and then considers the legal procedures involved, the function of expert witnesses, and the variety of consequences that may flow from success or failure.

He has accomplished his mission so well that this book should be regarded as the most important treatise on the subject to be published in recent years. This is the case despite the fact that there are no blinding insights, no new data, and one finds no really quotable passages. Goldstein's accomplishment rests on his ability to cut through the maze of abstraction and polemical debate that have surrounded the insanity defense and to present a reasoned, well-documented, and systematic analysis of the subject.

SOME generalizations about criminal law theory are required to provide a common frame of reference for the discussion of insanity. At the core of our system of criminal law is the concept

of personal guilt based on personal blameworthiness. Man is viewed as a free agent with the power and obligation to conform to authoritatively stated norms of conduct. While this may sound quaint, and while it may read like a relic from ancient times, it is the cornerstone of our criminal law and the *raison d'être* for the insanity defense.

The criminal law presumes that all men are sane, i.e., responsible for their voluntary conduct. Sane men, it is presumed, will be deterred from criminal conduct by the threat of criminal sanctions. As early as the thirteenth century, it was recognized that there are those who are "so lacking in mind or reason as to not know what they are doing." Such persons cannot be deterred by threats nor are they "fit objects of punishment."

Criminal responsibility was linked to an 'evil mind,' a mind bent on producing harm or grossly indifferent to the possibility of producing harm. A person who was not capable of intellectual discriminations, of weighing alternative courses of action and choosing the correct course, could not be deemed blameworthy. The defense of insanity eventually evolved as the legal construct whereby men accused of crime might be relieved of criminal responsibility if at the time of the event they suffered with a serious mental disorder.

Few legal writers have disagreed with the legal policy of exculpating those who acted at a time when they were seriously mentally ill. How to express and administer a satisfactory rule of insanity—and more often simply how to express it—has been the subject of the 'great debate.'

THE 'great debate' in this century began in 1954 when the United States Court of Appeals for the District of Columbia announced a new rule for the determination of the defense of insanity: the now famous *Durham* rule. The court abandoned its previous rule—a combination of the venerable *M'Naghten* 'right and wrong' standard and the 'irresistible impulse test'—in favor of the deceptively simple rule that "an accused is not criminally responsible if

his unlawful act was the product of mental disease or mental defect."

The *Durham* decision brought with it an avalanche of writing and discussion. The *M'Naghten* 'right and wrong' test was flayed with a vigor rarely seen in the literature. *Durham* was discussed *ad nauseam* and while it had its critics, too many commentators uncritically welcomed it as heralding the Age of Enlightenment.

Durham, it was presumed, would finally free the experts to speak in their own terminology and describe the 'whole man,' and the experts would be free of the moral or ethical judgments seemingly required by *M'Naghten*. Persons accused of crimes and suffering from serious mental disorders would be diverted from the punitive criminal justice system into the therapeutic mental hospital system. Lawyers, psychiatrists, and psychologists would enter the golden era of a truly interdisciplinary approach to deviant behavior. There would be fruitful 'dialogue.'

Of course, none of this has occurred. The *Durham* rule has been accepted in only two jurisdictions outside of the District of Columbia and even there it has been so modified by subsequent decisions as to be virtually unrecognizable. As Professor Goldstein demonstrates so well, to place all hope of reform in semantic manipulation is to insure disappointment. To be unwilling or unable to implement change is to invite disaster.

GOLDSTEIN's thesis is extremely well reasoned and seems unimpeachable. He demonstrates that the polemics concerning *M'Naghten*, *Durham*, or any other test have served to obscure the real issues. How one states the insanity test—'knowledge of right and wrong,' 'a product of mental disease or defect,' 'capacity to control one's conduct' and so on—is infinitely less important than the procedures and evidence available to identify those defendants who are seriously ill and—even more important—the actual consequences that flow from an acquittal by reason of insanity.

Non-lawyers may not be too concerned with the nitty-gritty of legal procedure: Who must come forward with evidence of mental illness? How is the

presumption of sanity overcome? Must the prosecutor prove sanity or must the defendant prove insanity, and by what evidentiary standard? Goldstein convincingly shows that the procedure by which the ultimate issue is reached and resolved is likely to be more determinative of the outcome than the precise words of the test.

The author carries the inquiry further and deals with the potential consequences of 'success' or 'failure' in the assertion of the defense. Unlike other successful defenses, an acquittal by reason of insanity, with few exceptions, results in automatic confinement in a mental institution—and for an indefinite period. The choice is not freedom *v.* confinement, it is confinement in a prison *v.* confinement in a mental institution.

More than any other factor this tends to confine the insanity defense to the most serious offenses, in particular to those carrying the death penalty. Because of its restricted use it is nonsense to rely on the insanity defense as a device to identify and classify criminal defendants who are seriously ill. Why should a defendant who may be quite ill but faced with a relatively short criminal sentence run the risk of indefinite confinement? A defendant who desires and needs treatment is likely to be disappointed with what awaits him at a typical public mental hospital. The supreme irony is that some penal institutions are more therapeutically oriented than available mental institutions.

Once a defendant is acquitted on the basis of insanity and then committed, by what procedures, and measured by what criteria shall he be conditionally released or discharged? If the standard is 'no longer dangerous,' and if we overlook the fact that typically he has not been judicially determined to be dangerous, then, dangerous to what interests and under what circumstances? If the standard is 'recovered his sanity' then is that decision to be reached by the same factors used at the trial? Does it follow that hospital administrators prolong confinement of the 'criminally insane' rather than risk community and political pressure?

The book, *The Insanity Defense*, raises these and other distressingly dif-

difficult issues that either have been ignored or treated as discrete problems. More than any other scholar Goldstein has moved the debate from the semantic and conceptual boundaries of the rule itself to the multidimensional world in which it must operate.

As illuminating and important as the book is, there are the inevitable problems. Goldstein merely flirts with some really tough issues, for example, the availability of the insanity defense in a large number of offenses that require no mental element (the so-called public welfare offenses). He ignores the important defense strategy of implanting a concept or image of 'craziness' through questions asked of prospective jurors during *voir dire* examination.

These are relatively minor objections when compared to the author's use of the term that is the core of his book—insanity. In the effort to move the debate from the words of the test to an operational context, Professor Goldstein repeats and thus perpetuates what is a fundamental, conceptual, and semantic error.

Regretfully, he repeatedly uses the same word, insanity, to describe both a mental condition and the legal concept of criminal irresponsibility based on mental disease or defect. The term insanity describes no mental condition of which I am aware. Properly used, it has a single meaning—criminal irresponsibility. When a defendant is found not guilty by reason of insanity it may be reasonable to imply that he is seriously ill, although in many jurisdictions, as Goldstein tells us, all the decision means is that the government has failed in its burden to prove the defendant sane. In short, a formal pronouncement of insanity tells you much more about what the judge or jury want done with a man than it tells you about the man.

The author does nothing to inhibit the common use of the word insanity to describe a variety of related yet dissimilar legal decisions. For example, the Texas Penal Code incorrectly uses the word insanity to describe the legal inquiry into competency to be tried, sentenced, and executed. As a consequence, Texas courts have incorporated criteria ('right and wrong' test) designed only

for the determination of responsibility with the criteria used to determine competency.

The defendant's mental condition properly may be at issue during several phases of the criminal process. Responsibility (sanity) is involved only when the focus is on his mental condition as of the time of the criminal event. When the focus is on the defendant's mental condition at any other time in the process, the decision will involve diversion from the criminal process, delay of the proceedings then pending, or, following an acquittal by reason of insanity, enforced hospitalization which will include

a variety of issues concerning the out-patient's relationship to the hospital.

It is unfortunate and confusing to continue the use of one word—a word already entangled with misleading medical implications—to describe these different decisions.

No one concerned with the operation of the defense of insanity—lawyer and clinician—can ignore this book. For those who must participate in the decision-making process it represents the best and most complete summary and analysis. For those hearty souls who wish to carry the inquiry further, it represents the point of beginning

New Text in Physiological Psychology

J. Anthony Deutsch and Diana Deutsch

Physiological Psychology. Homewood, Ill.: Dorsey Press, 1966. Pp. 553. \$9.00.

Reviewed by WALTER MINK

The Deutsches, J. Anthony and Diana, are both Oxford Firsts and products of the Institute of Experimental Psychology at Oxford. They started writing this book while J. Anthony was at the Center for the Advanced Study of the Behavioral Sciences. J. Anthony has taught at Oxford, Stanford, NYU, and now he is Professor at the University of California at San Diego. He is author of The Structural Basis of Behavior. His present research is centered around the physiological basis of memory, while his wife is working on the CNS basis of auditory discrimination.

The reviewer, Walter Mink, is a 1957 PhD from the University of Minnesota. His psychological heritage is mixed since he was trained as a clinical psychologist at the University of Minnesota Hospitals but did his dissertation

in verbal mediation under Wallace Russell and James Jenkins. Since 1958 he has been principally a teacher of psychology at Macalester College, but for the past two years he has worked with James Olds at the University of Michigan where he was able to work in physiological psychology, with a special interest in neuronal activity during the stages of sleep. He is now back at Macalester busily setting up a laboratory in physiological psychology. He is author with Roff and Hinrichs of Developmental Abnormal Psychology.

THE FIELD of physiological psychology in its present form may defy attempts at definition either in terms of content or methods. However, physiological psychologists seem to know what they are doing and they are very busy

at it judging from the flood of articles, and now books, that are coming from them. Armed with electrodes and canulae, guided by stereotaxic atlases, and speaking a mixed language of psychology, neurophysiology, biochemistry, and pharmacology they are demonstrating that there is much that is motivating, memorable (both short-and long-term), reinforcing, and even stimulating about the investigation of the brain.

The accumulation of information in recent years has been so great that previous textbooks are badly outdated. The publication of a new textbook is an event that arouses considerable interest and perhaps eager anticipation. The Deutschs' text certainly warrants interest though it may not quite reward eager anticipation.

The authors begin abruptly with a discussion of regulation of eating and drinking and conclude just as abruptly with a sketch of anatomical structure. The rationale for this reversal of traditional format is based on the assumption that students with a behavioral background will have their interest sustained by beginning immediately with topics which are related to what they have already learned in psychology. It is unlikely that the pedagogical validity of this approach will be assessed. It is true that the most interesting chapters in the book are at the beginning but this is probably a reflection of the authors' devotion to their topics.

Areas that are most prominent in contemporary physiological psychology receive extended treatment including adequate basic reviews and detailed analyses of some special problems that in several instances happen to be relevant to the research interests of the senior author. The first two chapters deal with motivational systems, specifically hunger and thirst and reproductive behavior. The next two chapters are concerned with the physiological bases of memory and learning and intracranial self-stimulation. A chapter on arousal, sleep, and attention follows and then two chapters on emotion, the second of which is devoted to ablation studies. The next five chapters cover sensory systems. A chapter on the motor system is contributed by Ian P. Howard and a chapter on neuronal physiology by C. I.

Howarth. The final chapter presents basic neuroanatomy. The order of chapters is not particularly important since each chapter is self contained and there is no attempt to provide any sequential or hierarchical structure to the presentation.

SOME notice should be taken of the coverage the senior author gives to his own work. The chief examples are the studies of anticholinesterase-induced amnesia and the studies related to the 'drive-induction drive-decay' interpretation of intracranial self-stimulation. The purpose of this extended treatment seems to me to be consistent with the major theme of his earlier book, *The Structural Basis of Behavior*. There, he states his strong preference for approaching a body of evidence with explicitly worked-out hypotheses. The examples included in the present text illustrate Deutsch's theory building and hypothesis testing. While I confess more interest in his experimental results than in his theoretical formulations, it is refreshing to find someone still laboring in the theoretical field rather than just at the empirical mill. I am sure that students will be provoked (in the good sense) by Deutsch's examples and many may wish to respond to the experimental challenges he provides.

There are many good chapters in this text and a few weak ones. The chapters on motivation are substantial and informative. The discussion of learning, memory, and self-stimulation is dominated by the senior author's investigations but worthwhile for the reasons given previously. Current attention-getting work on the molecular basis of memory storage is treated with brevity and appropriate skepticism, while the extensive literature on EEG phenomena associated with learning is touched on very lightly. Arousal, sleep, and attention are handled very well but the treatment of the paradoxical phase of sleep is quite brief considering the prominence the topic has achieved recently. Emotion is reviewed in a consistently interesting and instructive manner. Sensory systems are adequately surveyed though the psychophysical aspects of sensory processes are slighted.

The motor system is handled in a broad but somewhat superficial way in comparison with other chapters. The chapter on neuronal physiology is brief and somewhat spotty. Students who depend on this chapter for their main introduction to neurophysiology are likely to be confused, particularly by the discussion of the action potential, and will have to seek clarification elsewhere. The final chapter on neuroanatomy is the usual quick run up the spinal cord and into the brain. Perhaps the authors were correct in putting it at the end.

Since this is a book intended for student use, who are the students who would benefit from it most? The student taking his first undergraduate course in physiological psychology may be awed by the sophisticated level of treatment, dismayed by the absence of any introduction to basic research techniques and confused about neuronal function and anatomical structure. The graduate student with a prior introduction to the field probably will like the substantial coverage of important topics, appreciate the significance of current research and may be stimulated to embark on his own experimentation. Experienced teachers and researchers may quibble about certain inclusions or exclusions and argue about the alternative interpretations of the authors' research results but will find a second reading of the first seven chapters worth the effort.



Although, as I have said, the question of human instinct is a far from simple matter, we shall probably not be wrong in assuming that the learning capacity, a quality almost exclusive to man, is based on the instinct for imitation found in animals.

—JUNG



Child Development Develops

Lois Wladis Hoffman and Martin L. Hoffman (Eds.)

Review of Child Development Research. Vol. II. New York: Russell Sage Foundation, 1966. Pp. xi + 598. \$8.00.

Reviewed by URIE BRONFENBRENNER

The editors, Lois Wladis and Martin L. Hoffman, are husband and wife and both are at the University of Michigan. Lois Hoffman is Lecturer in Developmental Psychology and author, with Nye, of The Employed Mother in America. Martin is Professor of Psychology and Head of the Program in Developmental Psychology. His chief research interest is in the moral development in children. Together they edited the first volume of Review of Child Development Research.

The reviewer, Urie Bronfenbrenner, is Professor, Child Development and Family Relationships, Cornell University. He describes himself as a biological, developmental, social psychologist in ascending order of concern. When not doing experiments and field research in various quarters of the globe, he can be found at Cornell University where he teaches introductory psychology as a discussion section for 650 students.

THE second volume of Hoffman and Hoffman's handbook is a worthy sequel to its predecessor, which has become a standard reference in the field. Although a few of the chapters fail to rise far above the regrettably traditional level of compulsive recapitulation of findings, in most instances the editors have been successful in inducing their authors to identify theoretically-relevant generalizations and promising directions for future research.

To be sure, there are certain areas of child development which are just beginning to be explored systematically,

and here even the most capable critic can do little more than sketch a crude map of the emerging terrain. This comment applies particularly to the chapters on "Socialization and Social Structure in the Classroom" (Glidewell *et al.*) and on the "Development of Occupational Motives and Roles" (Borow). But Douvan and Gold's description of "Modal Patterns in American Adolescence" is able to go well beyond crude cartography. After decades of reliance on clinical lore and sporadic small-scale studies, we at last have available data from well-designed national surveys (the best directed by Douvan herself) of adolescent attitudes and behaviors.

Four areas with an established tradition of empirical research are properly reviewed by delineating major scientific achievements and theoretical issues. Levine's systematic discussion of the psychological testing of children is one of the few chapters as useful to the beginning student as to the experienced investigator. Levine is especially to be commended for speaking plainly about "the spectacular failure of projective testing . . . found repeatedly in the literature." It is time we recognized that any scientific gain from the study of projective phenomena lies in treating them as dependent rather than independent variables. Equally healthy, in this reviewer's judgment, is the more general development, noted by Levine, of "a certain disenchantment with testing procedures . . . leading toward more direct observation of the situation in which the individual functions."

A case in point is provided by Ervin-Tripp's chapter on language development which documents the importance of dialectical differences to the learning of language, especially on the part of lower class children in a classroom committed to the use of middle class English. "The problem is analogous to multilingual training and similar techniques are appropriate."

Proshansky, confronted with a massive and often messy literature in inter-group relations, manages to winnow the wheat from the chaff and present a well organized statement of present knowledge about the structure of ethnic attitudes, their antecedents, and strategies for attitude change. More exciting theoretically, but regrettably more diffuse in presentation, is Short's analysis of research on juvenile delinquency

BUT the most impressive chapter in the volume deals with an area which, paradoxically, only a few years ago was looked down upon for the low calibre of its research and theoretical compass. Zigler's account of research issues in mental retardation is not only comprehensive but exciting reading as well, for he makes this field what every specialized study in psychology should be—a window to an understanding of man at large. Especially provocative is his emphasis on motivational and emotional factors as distinctive features in the so-called familial retardate. Indeed, in viewing current programs for the culturally deprived, Zigler sees greater promise in the therapeutic manipulation of motivational, social and emotional factors than in efforts to raise intellectual competence *per se*, for, as he correctly points out, we are currently in danger of repeating the tragic history of the training school movement, in which undue optimism about the educability of the retarded led to an equally unwarranted reaction of pessimism and resignation.

Finally, there are three chapters which are discouraging in the picture they present of progress in their respective areas. Clausen's treatment of family structure, socialization, and personality is thorough in its coverage and thereby reveals the still primitive state of re-

search on family structure, which, as he points out, is replete with correlations but weak in pinning down underlying processes. In addition there are many contradictory results, although one suspects that the discrepancies may often be due as much to differences in method as in substance. Even more disheartening, from the perspective of scientific advance, is Lipton, Steinschneider, and Richmond's review of research on psychophysiological disorders in children. Firm knowledge in this sphere still extends little beyond the clinical description of symptoms, with process remaining largely in the realm of physiologic and psychoanalytic speculation. Here is an area which could surely profit from more rigorous research design. One hopes that the inclusion of this chapter in the present volume will help involve more behavioral scientists in solid work in this sphere.

The last chapter in the volume, Garn's analysis of "Body Size and Its Implications" falls short of doing justice to a potentially important but heretofore neglected area. Far too much of the discussion focuses on methodological problems in measuring body size and far too little on the body as a social stimulus and the role it plays in the genesis of social relationships.

As a husband-wife team, Hoffman and Hoffman are to be congratulated on their second editorial offspring and encouraged in their stated intention to continue the series.



Discipline yourselves to speak from your heart and from your mind, that is, from your own experience, to the people who have provided you with the ground and framework of that experience. The more scrupulous your effort to make the passage from your conscience and consciousness to theirs the more successful you will eventually be—in whatever way is most important to you.

—HAROLD CLURMAN



Ego Psychology in a Microcosm

Roy Schafer

Projective Testing and Psychoanalysis: Selected Papers. New York: International Universities Press, 1967. Pp. 1 + 229. \$5.50.

Reviewed by HAROLD SAMPSON

The author, Roy Schafer, received his training in psychological testing at the Menninger Clinic in the early 1940's under the direction of David Rapaport. After moving to Austen Riggs in 1947, he acquired experience in intensive psychoanalytic psychotherapy, working with Robert Knight, Merton Gill, Margaret Brenman, and Erik Erikson. During this time he took his PhD at Clark University under Heinz Werner. He went to Yale University in 1953 and has been there ever since. He completed his psychoanalytic training in 1950. He is author of The Clinical Application of Psychological Tests and Psychoanalytic Interpretation in Rorschach Testing.

The reviewer, Harold Sampson, received his PhD in clinical psychology in 1953 from the University of California, Berkeley, and has since then been active in both clinical research and in practice. His main current interest and preoccupation as both practitioner and clinical investigator is with psychotherapeutic processes. He is Director of Research, Department of Psychiatry, Mt. Zion Hospital, where he and his colleagues are engaged in an intensive study of change processes in psychoanalytic therapy. He is also engaged in private practice.

to the psychometric tradition, a response was conceived of as the end product of a complicated mental process, rather than only as a score which derived significance from its correlations. Psychopathology and clinical syndromes were inferred from a person's characteristic style of thinking, perceiving, and communicating in response to the wide range of tasks posed by a test battery. Although Rapaport's approach was directed to the clinical problem of diagnostic classification, its virtues lay in its connections to a general psychology of thinking on the one hand, and to a sophisticated psychoanalytic ego psychology on the other.

Roy Schafer has been a major contributor to this tradition. His previous books have been distinguished by clear exposition of both the theoretical rationale and the actual step-by-step process of drawing diagnostically relevant conclusions from test protocols. No one has been able to make the clinical art of complex psychoanalytic inference from test data more explicit, systematic, and public. Schafer's initial emphasis on traditional diagnostic categories shifted progressively toward concepts closer to the psychotherapist's concerns, such as defensive strategies, and the integration of specific attitudes, values, and dynamic constellations within an organized ego identity. Specific contributions included analysis of the meanings of the Rorschach testing situation to both participants; detailed consideration of the Rorschach response proc-

THE TRADITION of psychodiagnostic testing developed by David Rapaport requires of its followers a disciplined, intense, almost unrelenting involvement in the microcosm defined by responses to a test battery. In contrast

ess; and the working out of a rationale for disciplined thematic analysis of Rorschach content which supplemented without neglecting attention to formal aspects of responses. His previous books have been particularly valued by psychologists engaged in learning, teaching, or practicing diagnostic testing but have also appealed to any clinician interested in close study of mental processes.

THE PRESENT BOOK is addressed to the same audience as its predecessors, but serves a less sharply defined function. It is a collection of nine articles published originally between 1953 and 1960. This collection is not a systematic statement of a new theoretical position, nor can it serve as an independent diagnostic textbook. The author justifies republication of the articles now as a convenience to readers; as a specimen of consistent application of psychoanalytic ideas to psychodiagnostic investigation; and finally, as "a record of a series of explorations—of increasing complexity, ambiguity, and difficulty—that have . . . heightened my own sensibility and may do the same for others."

The articles are unified by the author's topic, and consistency of purpose and viewpoint. There is some repetition between chapters, and the early chapters overlap topics treated more fully in the *Rorschach* book. The restatements, however, contribute to the coherence of this book as a series of studies departing from familiar diagnostic concerns and exploring ways of assessing highly individualized aspects of inner experience and character. This shift in emphasis is conveyed from many differing perspectives: content analysis; personality change in psychotherapy; variations in the nature and extent of regression in the response process; and the communicative style of TAT productions. Schafer illustrates his points by several extended analyses of test protocols, and many clinical vignettes. The most novel—and least systematic—explorations are attempts to capture the subtle, elusive ways in which the subject's body ego and his inner experiences of perceiving and acting may be represented in his test behavior, scores, ways of communicating, and re-

sponse contents. These attempts seemed to the reviewer informative and successful in dealing with primitive schizophrenic experiences, but ambiguous and only suggestive in other applications.

In the course of an extended treatment of the use of test-retest data in assessing psychotherapeutic change, Schafer spells out the research recommendations which follow from his clinical perspective. His thesis that the appropriate research unit in using tests for assessing therapy change is a test interpretation rather than a score or theme count highlights the discrepancy between our characteristic clinical research methods and our judgment of clinical realities. He does not deal, however, with the very real problem of achieving even tolerable interjudge reliability for complex interpretive judgments.

This book appears at a time when there is a perceptible decline in interest in projective techniques, psychodiagnosis, and psychoanalysis. Many clinical psychologists view diagnosis as sterile, or obsolete, or so implicated in traditional medical models as to jeopardize our intellectual freedom if not our professional autonomy. The increasingly prominent behavior modification therapies neither require nor esteem understanding of intrapsychic processes. The turn from individual diagnosis and therapy to the group, the family, and the community, also has been accompanied by decreased attention to inner experience. But Schafer's purposeful focus on the microcosm of test responses in order to understand "the individual mind and how it is put together" expresses one of psychology's timeless concerns. These essays do in fact contribute to a heightening of the reader's own clinical sensibility.



In order to understand a person completely, one would sometimes have to be that person.

—GEORG CHRISTOPH LICHTENBERG



Theories of Learning Centrifugal Psychology

Ernest R. Hilgard and Gordon H. Bower

Theories of Learning. 3rd Ed. New York: Appleton-Century-Crofts, 1966. Pp. vii + 661.

Reviewed by FRANK RESTLE

The first author, Ernest R. Hilgard, is Professor of Psychology at Stanford University. He is author with Marquis of *Conditioning and Learning* (revised by Kimble in 1961) and of *Introduction to Psychology* as well as previous editions of *Theories of Learning*. The second author, Gordon H. Bower, is also at Stanford University. He studied with Neal Miller, has worked on motivation and learning, but is better known for his all-or-none model of red-associates learning and mathematization on memory and on choice processes. He is author with Atkinson and others of *An Introduction to Mathematical Learning Theory*.

The reviewer, Frank Restle, is Professor of Psychology at Indiana University. He received his PhD from Stanford University and has taught at Michigan State. He says he is a learning theorist of the mathematical type, cognitive bent. He is interested in hypothesis theory (selection of strategies), judgment and choice, geometrical illusions, cognitive content of music, processes underlying arithmetic, logical theory of probability, and helping to run a computerized laboratory!

IN the 1920's and 1930's American psychology made its first important intellectual contribution, behaviorist learning theory. In the rat laboratories of great universities a philosophy of man, a theory of the relation of knowledge and drive, and an ideology of the adjustment of behavior to the environment, were hammered out. Terrible debates raged, criticism was deadly and implacable, and all parties to the new psychology were stretched to the utmost of their creative powers. During this

age, psychology emerged, toughened, into a science. Then came World War II.

In his useful and imitated first edition of *Theories of Learning*, Hilgard in 1948 marshaled all the theories developed before the war, and saw to it that we were familiar with each of the major contributors to learning theory; Thorndike, Guthrie, Hull, Skinner, the Gestaltists, and the Functionalists.

As I recall, Hilgard's *Theories* was a good point of departure for any PhD candidate or young instructor in learning. It told him what to read and what to look for in the literature. In 1956, a second edition was brought out, introducing Freud, mathematical models, and neo-Hullian topics that became current after World War II.

Hilgard's *Theories of Learning* was used for many years because of his clear exposition of the theories, each in its own terms. In the heat of battle only Hilgard kept his cool, and after dusk fell, only Hilgard maintained his interest. His steady, reasonable, coherent presentations became better known than the outpourings of the theoretical creators themselves. Perhaps Hilgard rounded off some of the more brilliant facets, but he transmitted the warmth and emotion, and the general ideas, of learning theory.

The second edition, 1956, was not so useful to researchers as was the 1948 version, though it was probably a better textbook. Somehow, the newer work did not fit into the framework of "theories," centered around individual world-views, and became a hodge-podge of empirical findings from the learning laboratory. By 1966, the second edition was outdated. It was finally left behind by new developments and became almost a history of "how we used to think about things." The reviewer has taught learning theory for years, and finally had added so much supplementary reading as to bury the original textbook.

IN 1966 a new edition, incorporating the old Hilgard but with seven new chapters (five by Gordon Bower), has been published. The new chapters cover Pavlov, Mathematical Models, Information Processing, Physiological, Motiva-

tion and Memory, Attention, and Educational Learning Theory. Each of the new chapters is fresh and has the flavor and texture of the area described. Also, each is full of concepts and facts that every graduate student in psychology should know.

The descriptions of new work are more complex and detailed, less smoothed over, and less homogenized than the chapters that have tumbled around in the book for many years. Bower's tone has less warm tolerance than Hilgard's and he is tougher in his demands on both theorists and his readers. This may come as something of a relief to teachers who over the years have experienced Hilgard's panoramic prose too often. Still, the book is even in level and purpose and convenient to use in the classroom, and it is so broad in coverage, and so up to date, that it meets most of the teacher's needs. I recommend this book at the upper undergraduate or beginning graduate level, as a text.

Rarely do scientists of the standing of Hilgard and Bower condescend to write textbooks, and we may hope that their books will be distinguished essays, serving to propel the field to new levels of accomplishment. By this standard of judgment, Hilgard's and Bower's *Theories of Learning* is always interesting, but not gripping, though it deals with an astonishingly creative period in psychology; it is judicious but not critical, for it finds both good and bad characteristics in all theories, and evaluates each branch of theory within its own frame of interests; it is broad, touching many different approaches and ideas, but not integrated. This book projects no image of learning theory as a single enterprise. If learning theorists are still, as they once were, all sitting around a single table, we must conclude they are all turned around and facing in different directions.



Love has no dominion over the worms
in the coffin.

—FRANÇOIS-RENE DE CHATEAUBRIAND



Modern Statistics for Behavioral Sciences

Allen Edwards

Statistical Methods. 2nd Ed. New York: Holt, Rinehart & Winston, 1967. Pp. xvi + 462. \$8.95.

Daniel S. Lordahl

Modern Statistics for Behavioral Sciences. New York: Ronald, 1967. Pp. xii + 365. \$9.50.

Reviewed by ARNOLD BINDER

The author of the first book, Allen Edwards, has, since 1944, been at the University of Washington, where he is now Professor of Psychology. His PhD is from Northwestern and he has taught at the University of Akron and at the University of Maryland. He has also been a psychologist for the War Department and in the Office of War Information. His interests are psychological measurement, attitudes, and personality. He is author of *Experimental Design in Psychological Research*, *Statistical Analysis*, and other books. Daniel S. Lordahl, author of the second book, is Associate Professor at the University of Miami. He received his PhD from the University of Wisconsin and taught at Washington University before moving to Miami. His interests are in concept formation and learning theory, experimental design and mathematical statistics.

The reviewer, Arnold Binder, is Professor of Psychology and Director of the Formal Models Program, University of California, Irvine. His is a Stanford PhD and he is presently Director of the Program of Mathematical and Computer Models in the Behavioral Sciences, an interdisciplinary equivalent of the more traditional University department. Before moving to Irvine he was, for many years, at Indiana University.

SINCE the Edwards text is a revision, it seems natural to compare it with the earlier edition, published in 1954. The revised edition, like its predecessor, is al-

most evenly divided into two portions: descriptive methods in the first half and inferential statistics in the second. Except for the movement of a chapter on arithmetic and algebraic rules to the appendix, the elimination of a chapter on rudimentary measurement theory, and the reorganization of a few chapters, the first half of the new edition is essentially identical to that of the earlier one. The principal changes in the second half are the additions of a chapter on sets, axiomatic probability, and random variables (the previous edition had only a few perfunctory paragraphs on probability as relative frequency) and a chapter introducing trend tests. But just about all the remaining chapters of this portion of this book have been thoroughly reorganized.

I have two major objections to the first half. First, it contains a good deal of material that is badly dated and should have been excised completely. For example, there are extensive discussions of the methods of calculating mean, variance, and correlation coefficient by using class intervals and coded scores. And, second, since powerful models for linear regression and correlation are readily available and easily presented to beginning students, it seems pathetic to treat them purely descriptively as Edwards does.

I think the organization of the second half represents a vast improvement over the earlier book. But, despite the advertising claim of a new emphasis upon probability and probability functions, and despite a good chapter on sets and probability, there is not much change in the over-all relationship of statistical discussion to its probability background. My feeling was that the discussion of sets and probability was added but not well integrated into the text.

THE BOOK by Lordahl is a strange amalgamation of old fashioned psychological statistics (despite its title), quite original descriptive approaches to issues of statistical inference, and misinformation. My feeling is that, despite virtues, the last of these is severe enough to disqualify the book. Moreover, in addition to the clear inaccuracies, there are numerous discussions throughout the book

that miss the mark despite the absence of blatantly erroneous statements.

To illustrate the misinformation, gross and mild, we have the following:

a. After presenting

$$Y = \frac{1}{\sigma\sqrt{2\pi}} e^{-[(X-\mu)^2/2\sigma^2]}$$

as the functional form of the normal distribution, the author states that this equation "gives a value of Y , which may be likened to the relative frequency of a score value, for any X . . ." The problem seems to have resulted from considering the normal curve as an idealization of the frequency polygon whereas its discrete equivalent is actually the histogram.

b. A statistic is defined as a function on any set of numbers (even a population, which produces the strange state of affairs whereby a parameter is a statistic). The term 'function' later becomes equated with 'calculational rule' to produce logical chaos when dealing with continuous distributions.

c. The text makes a distinction between sampling different score sets from a "single normally distributed population" and sampling the sets from different normal populations with equal parameters, as though the normal distribution were an object in reality rather than a concept.

d. The concepts of regression and bivariate normal analyses are completely confounded which leads to such absurdities as speaking of the parameter ρ with fixed X 's in a linear regression context.

There are two final points. First, the discussion of scales (nominal, ordinal, interval, ratio) in the context of statistical analysis is particularly nonsensical. One conclusion, for example, is that one cannot do an analysis of variance with IQ's. Another is that a ratio scale results from counting. I just don't understand why such discussions on the limitations imposed upon statistical analysis by measuring techniques persists despite the writings of Suppes, Adams, Savage, Luce, and Burke.

Second, Lordahl starts his discussion of statistical inference in Chapter 4; he then proceeds to discuss, in subsequent chapters, sampling distributions, hy-

pothesis testing, the normal distribution, the analysis of variance, and χ^2 . But the chapter devoted to probability doesn't come until Chapter 10, following all of the preceding topics.

To summarize, I would not adopt the Edwards book in view of superior competitors and I feel that much more care should have been taken before putting Lordahl on the market.

Too Many of a Good Thing

Eliot Stellar and James M. Sprague
(Eds.)

Progress in Physiological Psychology. Vol. 1. New York, Academic Press, 1966. Pp. xi + 285. \$9.50.

Reviewed by ROBERT W. DOTY

The editors are both Professors in the Institute of Neurological Sciences, Department of Anatomy, University of Pennsylvania. E. Stellar is well-known to psychologists as co-author of a very widely used text of physiological psychology, and as editor of the Journal of Comparative and Physiological Psychology. J. Sprague has an extensive background in neuroanatomy and neurophysiology and has recently made several important discoveries concerning the role of the superior colliculus in vision. He is also an editor of Experimental Neurology and chairman of the Department of Anatomy.

The reviewer, R. Doty, holds a professorship in the Center for Brain Research, University of Rochester, and has utilized neurophysiological techniques in many studies of learning and motivation, as well as in studies of vision in cats and monkeys.

THE six review papers in this book are all of outstanding quality. They are: "Neurophysiological Correlates of

Information Transaction and Storage in Brain Tissue" by W. R. Adey; "Attention and Auditory Electrophysiology" by F. G. Worden; "Sensory Deprivation" by Austin H. Riesen; "Anatomical Locus of Reinforcement" by Elliot S. Valenstein; "Physiology of Thirst" by Bengt Andersson; and "Response-Modulating Functions of the Limbic System: Initiation and Suppression" by Robert A. MacCleary. The authors have given lucid summaries of a large and diverse body of fact, and have carefully detailed shortcomings and difficulties in interpretation.

The scientific merit and usefulness of this volume is thus beyond question. What needs to be questioned, however, is whether the continuing proliferation of volumes of this type provides the most efficient means of bringing such material to its potential audience. The reviews presented herein would have been equally relevant in: *Physiological Reviews*, *Psychological Bulletin*, *Annual Review of Physiology*, *International Review of Neurobiology*, *Brain Research*, *Advances in the Study of Behavior*, *Contributions to Sensory Physiology*, *Frontiers in Physiological Psychology*, plus a plethora of symposium volumes or even the uneven *Progress in Brain Research*. Including the present volume, five new overlapping series of review articles have been initiated within the last two years.

Aside from probably being a good thing for the publishers, the main impetus for such a population explosion in review volumes must come from inadequacies in the older, more established series. Scientific societies seem to have been remiss in their leadership in this area, or perhaps no longer reflect the true interests and allegiances of their members. In any event the scattering of this significant literature into a chaos of library call numbers is a questionable procedure. It would seem more desirable for the great effort and talent found in the above-listed publications to be consolidated into a bi-monthly or monthly journal (*Neuroscience Reviews*?) of illustrated, critical and detailed review articles, individual issues of which might concentrate upon certain topics. If so, could this be achieved by existing societies, or must

a realignment occur to achieve adequate strength for the large but academically scattered group of neuroscientists to whom the present "Progresses," "Frontiers," and "Contributions" are so obviously addressed?

The Many Handbooks of Color

Gunter Wyszecki and W. S. Stiles

Color Science: Concepts and Methods, Quantitative Data and Formulas. New York: Wiley, 1967. Pp. xiv + 628.

Reviewed by CONRAD G. MUELLER

The first author, Gunter Wyszecki, received his Dipl.-Ing. and Dr.-Ing. from the Technical University of Berlin. As a Fulbright scholar, he served with the National Bureau of Standards, he has been a research worker for the Berlin Federal Bureau of Testing Materials, and he is now a Principal Research Officer and Head of the Radiation Optics Section of the National Research Council of Canada. He is co-author with Judd of *Color in Business, Science, and Industry*, 2nd Ed. The second author, W. S. Stiles, received a PhD and a DSc from University College, London. He held the position of Deputy Chief Scientific Officer, The National Physical Laboratory, Teddington, England. He is the joint discoverer of the Stiles-Crawford Effect and holds many honors both in England and the United States for his research on vision.

The reviewer, Conrad G. Mueller, is Professor of Neural Sciences and Chairman of the Psychology Department at Indiana University. He is the Scientific Advisor to the NRC Committee on Vision. He is author of *Sensory Psychology* and co-author with Graham of *Vision and Visual Perception*.

THIS BOOK offers 600 pages of color science written by two authors, both of whom have contributed to the subject, one of whom is among the world's outstanding authorities in the area. This volume should be read by anyone attempting to master the topic of color.

This book makes uneven demands on the reader, for it is a handbook in several senses of that word. For example, one finds seventy pages of graphs of the spectral transmittance of approximately 200 filters; one finds twenty consecutive pages which table the color matching functions and the chromaticity coordinates in the 1931 and 1964 CIE Colorimetric System. These are not pages a reader will digest; they are pages to which experimenters and theorists will turn when the need arises. The book is partly a handbook in the sense of a compilation of data and numerical values.

The book is, however, much more than this. It is a basic review of the facts and theory of color. The sources and measurement of radiant energy, the theory of colorimetry and photometry, the statistical characteristics of quantum fluctuations, and many other topics are discussed. The reader's pace will be slow in some sections, e.g., when he encounters the algebra of transformations of tristimulus values of chromaticity coordinates, when he tries to evaluate the line element theories of Helmholtz, Schrödinger, Stiles, and others, or when he searches for an appreciation of the relative merits of Euclidian and Riemannian spaces as models for a hypothetical color space. For the reader who has not already traversed this territory, the going may get rough, but the trip is well worth the taking.

BIOLOGICAL and behavioral scientists interested in color may find the book uneven in depth of coverage, considering the title of the book. Remembering that seventy pages are devoted to graphs of individual filters, it may seem surprising that the topic of photopigments is given five pages. Chromatic adaptation, dark adaptation, the Stiles-Crawford, and Bezold-Brücke effects, are covered in a 25-page chapter entitled *Miscellaneous Visual Concepts and*

Data. One might almost judge that the physiology, biochemistry, and an appreciable part of the psychophysics, of color vision are *miscellanea* in color science. Let the reader who gets impatient with this emphasis remember, however, that one of the authors is the partner in the Stiles-Crawford effect, that his name is practically synonymous with the increment-threshold technique.

The authors have deemphasized many of their own contributions. These observations are mentioned to provide information for the potential reader; they are not meant to imply criticism. The material discussed in the book is consistent with the stated objectives.

Given the task, one can only ask whether the job is well done. The answer is clearly "Yes."

and interpretation of the data, and greater use of other bodies of knowledge.

Thus psychoanalysts have done much to enhance what is known about the effects of the loss of a love object. Martha Wolfenstein adds to this knowledge by once more posing the question of when can the child mourn successfully. From her extensive studies she suggests that it is not really possible until after the "mourning of adolescence has passed." This is in contrast to Furman's (1965) view "that mourning can occur quite early in childhood." He specifies as the precondition of mourning the child's acquisition of a concept of death and the attainment of object constancy. Reviewing data gathered during twice-a-week psychotherapy of 42 children who had in the past lost a parent, Wolfenstein indicates that children may show signs of missing the parent, but because of their intense and continued need actually intensify their cathexis and accompany it "with an overt or covert denial of the irrevocability of the loss." While her presentation is convincing, and draws on a variety of data, since she has relied mainly on the retrospective material from twice-a-week treatment, it may well be important to supplement this both with data from child analysis and with further observations made immediately after the death of the parent.

A Wider Outlook

Ruth S. Eissler, Anna Freud, Heinz Hartmann, and Marianne Kris (Eds.)

The Psychoanalytic Study of the Child. Vol. XXI. New York: International Universities Press, 1966. Pp. 635. \$12.00.

Reviewed by CHRISTOPH M. HEINICKE

The managing editors of this volume, Ruth S. Eissler, Anna Freud, Heinz Hartmann, and Marianne Kris, are all well-known leaders in psychoanalysis and have been for many years. The papers are predominantly by child analysts and psychologists involved in psychoanalytic research with children.

The reviewer, Christoph M. Heinicke, received his PhD from Harvard University in the Department of Social Relations. After completing a four-year training in psychoanalytic child therapy at the Hampstead Child Therapy Clinic he returned to this country to spend a year at the Center for Advanced Study in the Behavioral Sciences and then took positions at both Mt. Zion Hospital, San Francisco, and Stanford University. He is currently a Project Director at the Reiss-Davis Child Study Center where he teaches child development, supervises child therapy, and directs two research projects. He is author with Ilse Westheimer of Brief Separations, recently reviewed in CP.

presented at the first meeting of the American Association of Child Psychoanalysis, can be used to provide a framework for its evaluation. Citing as an example the various departments of the Hampstead Clinic, she calls for a "wide outlook" and suggests that students should from the beginning of their training, not only be "introduced to psychoanalysis as a method of treatment, but also experience it as a tool to use for exploration and study; as a theory in need of scrutiny and expansion; (and) as a body of knowledge capable of application to a wide number of needs in the community." As she notes, the official psychoanalytic institutes have neglected training in the latter skills.

The approach of the 20 contributions in this Volume does differ widely, but so does the quality of the results. Whether one uses the clinical criteria or various scientific guidelines, some articles leave many doubts. Others are outstanding and both add to and revise what has been established. Compared with contributions to previous volumes one finds more examples of a greater precision in formulating questions and concepts, greater care in the gathering

A PAPER on the role of sound in the search behavior of blind infants by Fraiberg, Siegel, and Gibson perhaps best represents the tendency seen in this volume to combine the psychoanalytic approach with other approaches to the study of child development. Previous work had raised the question as to why for the blind child "a sound-making object should not provide a motive for reaching." Using a definition of object as well as a methodology very similar to that of Piaget, the authors demonstrate the arduous steps through which the blind child must move. Not until about 12 months (as opposed to 2 months in the sighted child) did Robbie demonstrate an awareness of an "object out there" by reaching for objects on sound cue alone. This and other cases show further that whereas

EXCERPTS from Anna Freud's short history of child analysis, which introduces this volume and which she

"vision unites the sound and tactile qualities of objects in early experience, the tactile and auditory properties of the same object remain discrete experiences for the blind child until late in the first year." The authors also indicate that despite evidence of attachment to the human object, reaching for the speaking parent is no more efficient than reaching for the sound-emitting inanimate object. They recognize, however, that the observations on this important point are still incomplete. Of particular interest to the reviewer would be to determine whether differences in the parent-child relationship can be related to the time when the child does reach for the parent.

AN ARTICLE on self and object representations in a group of psychotic children by Ruth Thomas and her collaborators (Edgcombe, Kennedy, Kawenoka, and Weitzner) brings to this difficult area a freshness and incisiveness long associated with the intensive study through psychoanalytic treatment of the individual child. As in the previous studies discussed above, the result does also represent a careful pooling of thoughts and material.

Using Anna Freud's Diagnostic Profile as a starting point they delineate those characteristics of the self and object representations that hold for the four children which they treated. For those who have used the Profile either for diagnostic and/or research purposes, differential diagnosis will certainly be facilitated by their work. Perhaps even more important, our knowledge of the inner life of the psychotic child is enhanced. Stressing that in general the children experience little healthy narcissism, initial focus is placed by them on the psychotic child's inability to sustain a sense of self. For example, these children confused inner emotional states with body fullness or emptiness. Lucille said of another child: "She's got motions in her; that makes her happy." Norma tried to attach rubber tubes to her genitalia and fitted flippers to her feet. Interpretation of these at the phallic level only led to the proliferation of fantasies; understanding it as her need to replenish her "bodily

emptiness" resulted in her giving up the activities.

In discussing the human object world of these children it is stressed that their perception of it is primarily hostile. Primitive body pleasure can be seen but there is little evidence that they experience satisfaction. Human interaction is not seen as eventually leading to pleasure but rather the person is turned to as a provider of things and as an auxiliary ego. Initially these children needed the person to combat feelings of depletion and the associated tendency of dissolution of identity. After some treatment they became terrified of destroying the very individual that had given them some sense of integrity. Their helplessness was greatest when any change was imminent.

Both implicitly and explicitly the authors stress the intimate relation between disturbances in ego functioning and the nature of the inner and external experiences with other human beings. While using their knowledge of early development, they are careful not to posit stages of development from their treatment of the psychotic child. They do suggest that arrest in development involves a failure in relating to the caretaking person at the earliest ego level. But their investigatory caution is once more seen as they conclude that their data do "not permit them to determine whether this failure is due to an innate lack of potentiality or neurological defect or to a deficit in the earliest 'holding environment'."

It is very likely that advances in the area covered by this volume will continue to result from a variety of approaches. Space does not permit us to do justice to the other articles; there are stimulating contributions by Eissler, Greenacre, and Katan to mention only a few. It is perhaps not accidental, however, that three of the outstanding contributions in this volume involved leadership by an experienced clinician and investigator cooperating closely with a small group of colleagues and pursuing a topic over a considerable period of time.



CONTEMPORARY APPROACHES TO PSYCHOLOGY

Edited by Harry Helson, Kansas State University and William Bevan, The Johns Hopkins University. 1967, 608 pages, \$14.50.

DISCLOSING MAN TO HIMSELF

Sidney H. Jourard, University of Florida. 1968, 256 pages, \$2.50 (paper), \$4.95 (cloth).

CONTEMPORARY RESEARCH IN PERSONALITY: A Reader—Second Edition

Edited by Irwin Sarason, University of Washington. Spring 1969, about \$5.95 (paper).

FEAR OF FAILURE

Robert C. Birney, Amherst College; Eugene Burdick, Oakland University; and Richard C. Teevan, Bucknell University. January 1969, about \$4.95 (paper).

GENERAL PSYCHOLOGY: Selected Readings

Edited by Joseph Perez, The State College, Westfield, Massachusetts; Richard Sprinthall and George Grosser, American International College; and Paul Anastasiou, Tulane University. 1967, 432 pages, \$5.95 (paper).

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Wise Advice for R and D

Donald C. Pelz and Frank M. Andrews

Scientists in Organizations: Productive Climates for Research and Development. New York: Wiley, 1966. Pp. xii + 318. \$10.00.

Reviewed by HENRY B. EYRING

Both authors, Donald C. Pelz and Frank M. Andrews received their PhD's from the University of Michigan and both are there now in the Survey Research Center's Institute for Social Research. Pelz is Program Director and Associate Professor of Psychology and Andrews is Study Director and Lecturer in Psychology.

Henry B. Eyring, the reviewer, is Assistant Professor of Business Administration at Stanford University. His PhD is from Harvard University's Business School. His present research centers on the social and psychological aspects of decision-making in organizations and on the effects of organizational variables on cohesiveness in groups of experimental physicists.

AN ADMINISTRATOR needs to know, "What will happen if I try this?" A psychologist ought to be able to help him. But if he is to be really helpful the psychologist must identify more than past causality. He must predict the future effects on several performance measures of alternative actions the administrator might take. Too ambitious an objective for a study, considering today's methods? Perhaps, but well worth attempting as this book illustrates.

The practical solution, of course, is to provide psychologists who know they can't go all the way to this ideal, and administrators who see where the findings fall short and can close the gap with their own judgment. This book facilitates the approach to both these goals.

It incorporates its own reader, and he's one who is well aware of shortcomings in findings from survey data. He is a hypothetical director of a research and development laboratory, the primary target reader of this book. At the end of nine of the twelve chapters of research findings, he asks questions. The questions are pointed and the answers are frank. But, as an administrator consuming the book and as a critic, he is neither enthusiastic enough nor is he demanding enough. He could reasonably show much more enthusiasm for the insights this book provides beyond its predecessors, and could complain more strongly than he does about the gap he must close to use the findings.

THIS BOOK takes some huge steps forward in providing help to managers of laboratories and, incidentally, to scientists and engineers. Instead of advice from experience or from descriptive studies, it advises from analysis of questionnaire data. The data were collected from 1311 scientists and engineers in eleven laboratories in the United States. The dependent variable was scientific performance of the individual scientist. That variable was measured and reported in ways so diverse that the administrator-reader will certainly find his favorites. And though independent variables are sometimes abstract they are always at least roughly manipulable by the manager of a research and development laboratory: freedom, communication, diversity, dedication, motivation, satisfaction, age, etc.

This relating of variables is by itself ground for greater enthusiasm than is shown by the hypothetical reader. In Chapters 10 and 11, for instance, he learns that while productivity seems to decline in general during a man's forties, it doesn't have to. Certain kinds of productivity stay up for individuals with certain characteristics and in certain social environments. On getting advice to counteract this important problem in laboratories, the reader simply responds with a series of laconic one-line questions. The modest authors might have allowed him a little exclamation: "That's more sensible advice on the problem, based on better evidence, than I've seen before in print!"

However, while his emotions are unleashed, he might also be much more irritated by some of the gaps between data and advice, and between advice and using it. That is not to say the book isn't generally conservative in claiming proofs. It is. For instance, at the end of the chapter on communications, the authors say, "Of course, one possible reason [personal] contacts may have enhanced performance was . . ." The hypothetical reader spots the word *enhanced*, which also crept into the text earlier in the chapter, and shoots back: "Hold it! What makes you think that contacts 'enhanced' performance? Might it not work the other way around—high performance increased a man's contacts?"

The answer is a model of caution. Despite the fact that the analysis had taken into account differences in experience, supervisory status, and even which person initiated contact, the reply is: "Undoubtedly many scientists were sought out by others who wanted to learn something from the man they contacted. (An important teaching function may have been going on here.) So we would not want to rule out the possibility that some contacts occurred as a *result* of a man's previous high performance. But . . . it looked as if contacts did enhance performance . . . at least sometimes." In other places the book denies proving causality, and in some cases even points out that it has not been shown to be plausible. In Chapter 4 on diversity: "With survey data like ours you can never prove one

Principles of GENERAL PSYCHOLOGY THIRD EDITION

GREGORY A. KIMBLE
University of Colorado

NORMAN GARMEZY
University of Minnesota

The Third Edition of this distinguished and widely used textbook continues to offer a scientifically accurate account of contemporary psychology for the beginning student. It also retains the sound scholarship, clarity of style, and detailed treatment of important topics that characterized previous editions. Full of absorbing experimental detail, it views the subject as an objective, observational science. Dealing with basic methodological matters first, the book builds on this foundation, and then presents the more complicated aspects of psychology in terms which refer back to earlier discussions. Each chapter begins with an orienting overview, contains extensive summaries at the end of every major section, and concludes with a list of important concepts.

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PSYCHOLOGICAL DEVELOPMENT OF THE CHILD

LANGDON E. LONGSTRETH
University of Southern California

Firmly based on current research in child development, this textbook presents the basic factors of heredity, learning, motivation, and intelligence, and then examines the progression from infancy to adulthood with frequent references to the research data. Throughout, the author employs an empirically based, systematic learning-theory frame of reference. Rather than briefly mentioning many studies, he presents a few studies at length to give the student an understanding of procedures and results. The three methods of psychological study are carefully distinguished. Correlational studies are used to describe the course of psychological development; experimental investigations test the explanations of developmental facts; and, finally, clinical case histories are offered as illustrations of scientifically derived findings. Recent trends are fully covered: cognitive development, as treated by Piaget and others; environmental effects on intelligence, including results from recent physiological experiments; theories of intelligence; heredity and the increasingly significant findings of the role of genes. 1968. 571 pp. *Illus.* \$8.00

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causal hypothesis over another." And in another chapter, as part of a causality analysis: "Unfortunately there was no way to test the time order of events in these data."

This modesty could have been augmented with some discussion of the gap to be bridged by the administrator. The hypothetical reader reflects only the skepticism about causality that an experimental psychologist might voice about the use of survey data. But the administrator is also concerned with future effects of some alternative interventions. The chapter on freedom, for instance, finds highest productivity when the scientist involves several other people in shaping his assignments, but keeps substantial influence in the decision process. Even if he knew that the interpersonal relationships caused the productivity, the administrator's personal strategy for changing the relationship may be a substantially more powerful variable, and working in unknown directions. The book helps him little here, giving action advice sometimes only loosely connected with the empirical findings.

Chapter 6, on motivations, illustrates this gap between empirical data and confident action by a laboratory director. The last bit of advice at the end of the chapter is that monetary and status rewards be based significantly on colleague evaluations. That advice follows the questions: "How do you build the individual's pride in his own work? How do you encourage him to map his own plans rather than lean on the hierarchy?"

Those questions spring from the finding that several productivity measures were significantly higher when the respondent said he relied on his own ideas. Survey questions 13 and 62 provide this evidence. Responses including the words "my own" were interpreted to mean self-reliance. But no other responses tapped whether those scientists who selected "my own" responses were also those whose work was evaluated most by colleagues.

DESPITE the lack of evidence connecting evaluation with self-reliance, there may well be a relationship between colleague evaluation and pro-

ductivity. Much of the work on the social system of science is based on the idea that colleague evaluations are part of the reward system. It is quite another thing to imply that management-induced colleague evaluations will increase self-reliance, which in turn will increase productivity.

It may well be so, but the reader must remind himself that the action advice may work for reasons other than the empirically demonstrated relationship of productivity and self-reliance.

The great value of the book is that it does provide that basis of empirical data. These data relate productivity with variables that matter both to administrators and to students of organizations. One chapter shows that creativity can help or hurt productivity, depending on the situation. There are hints in the data as to which situations and why, and those hints should intrigue administrators and spur research by students of organizations.

The book should also be a spur to developing new methodologies. It provides, by far, the best available exploration of relationships between organizational variables and productivity in a research and development laboratory. Yet it leaves so much doubt in predicting the results of a management action that we clearly need major innovation. That innovation may come by detecting causal relationships in panel study data, attempted elsewhere by the authors (Pelz and Andrews, 1964), or as extensions of experimental techniques to field settings. Whatever the method, it must include management intervention in the causal chain if we are to move further toward this book's major objective: advising managers from empirical data.

For the present, this book sets the mark to beat in advising research and development managers.



The goal, perhaps, means nothing, it is the thing done that delivers man from death.

—ANTOINE DE ST. EXUPERY



Brass Tacks and Cotton Wool

Werner M. Mendel and Gerald Allen Green

The Therapeutic Management of Psychological Illness: The Theory and Practice of Supportive Care. New York/London: Basic Books, 1967. Pp. xii + 255. \$6.95.

Reviewed by C.G. COSTELLO

Both authors are at the University of Southern California School of Medicine, Werner M. Mendel as Professor of Psychiatry and Gerald Allen Green as Assistant Professor of Psychiatry and Assistant Dean of Admissions. Mendel also teaches at The Southern California Psychoanalytic Institute. Mendel received his MD from Stanford University and Green his PhD from the University of Southern California.

The reviewer, Charles Gerard Costello, is Professor of Psychology at the University of Calgary, Canada. He says that from 1953 to 1964 he played a double role as a clinical psychologist and an experimental psychologist in Scotland, England, and Canada but he was unsatisfied with this split and in 1964 became an experimental psychopathologist. He has written *Psychology for Psychiatrists*, and has two books in press—*Symptoms of Psychopathology* and *Experimental Studies of Single Cases*.

THERE was a time—happy bemused time—when this book would have seemed to me to be really 'with it.' But when one is born next door to a Lancashire cotton mill it is not long before the echo of clogs issues a summons: "Brass tacks, lad, brass tacks"! A father's voice can be heard again: "Don't let them pull the cotton wool over thee eyes."

There are a few brass tacks of the common sense type in Wendel's and Green's book, the purpose of which is to "... describe techniques of care for the chronic schizophrenic patient, as well as the theoretical basis for these

interventions." For instance, they discuss the manner in which role expectancies influence the behavior of therapist and patient. But brass tacks of the hard facts kind such as those presented by Goldstein in his *Therapist-Patient Expectancies in Psychotherapy* do not appear in this book.

A number of pat golden rules are offered which might be read to the rookie psychiatrist at the beginning of the first morning conference of his career as a therapist, e.g., "Don't be in a hurry" . . . "Primum non nocere." But they are not worth the amount of space they are given in the book.

Perhaps the rest of the morning conference could deal with advice, such as that presented in chapter 14 of the book, where one learns how to handle the patient's family.

But it is hard to find the brass tacks among all the cotton wool. Take for instance: "Scientific terms merely represent an attempt by one clinician to communicate with another about the observations he has made of his patients." or, "The psychotherapeutic relationship is the most intimate human relationship possible." The former is surely quite wrong and the latter quite doubtful.

Guides to the technique of therapeutic transaction advocated by the authors are presented with a bravado that seems premature in view of the fact that research on the process of psychotherapy has only just begun. Clinicians generally appear to hold the view that when there are no firm foundations for their techniques they should be performed bravely and boldly, whereas the reviewer feels they should be performed somewhat nervously and cautiously.

The spirit behind the book is an admirable one—the attempt to do something for the chronically ill, the arguments against long hospitalization. But the manner of the writing of the book is another matter. How, for instance, can we happily talk of passive-aggressive personalities outside Dylan Thomas-like verse when we know next to nothing about passivity or aggressiveness? It is not my cup of tea at all.



To "S"—Perchance to "D"

Ernest Hartmann

The Biology of Dreaming. Springfield, Ill.: Thomas, 1967. Pp. xiii + 206. \$9.75.

Reviewed by RICHARD M. JONES

The author, Ernest Hartmann, is Assistant Professor of Psychiatry at Tufts University School of Medicine and Director, Sleep and Dream Laboratory, Boston State Hospital. He is also an NIMH Career Investigator. He is co-author of Fifty-five Adolescents in a Mental Hospital.

The reviewer, Richard M. Jones, received his PhD from Harvard University in 1956. After ten years in the Department of Psychology at Brandeis University he has moved to sunnier climes and is at present Visiting Professor of Psychology and Consultant in Counseling at the University of California, Santa Cruz. He is author of Ego Synthesis in Dreams.

READERS of the New York Times Sunday Supplement need no reminding of the new star that appeared on the horizon of psychobiological research with the discovery by Azerinsky and Kleitman in 1956 that subjects in sleep laboratories reported dreams with startling regularity if the investigator was careful to awaken them when their EEG records indicated the presence of a distinctive low voltage brain wave pattern and the presence of rapid conjugate eye movements.

Since 1956, sleep and dream research has added more than its share to the general knowledge explosion. Sleep, it would seem, is not a steady state, but a recurrent cycle of states, distinguished by the alternation of two organismic conditions as different from each other

as either is from the waking state. Indeed, if Hartmann and others have their way, we will no longer think of one of these as sleep at all but rather as a third psychobiological state: the "D-State."

During the jockeying for position that often accompanies the approach of scientists to dramatic new discoveries, this third state has been variously labeled REM sleep, activated sleep, rhombencephalic sleep, pontine sleep, hindbrain sleep, light sleep, deep sleep, paradoxical sleep, and dreaming sleep. Very summarily it includes the concomitant presence of irregular pulse, blood pressure and respiration; penile erection; rapid conjugate eye movements; sporadic activity of certain fine muscle groups; near absence of tonic anti-gravity muscle potential; a low voltage desynchronized cortical EEG pattern; high brain temperature and metabolic rate; and, in humans, a high positive correlation with ability to report dreams upon being awakened. The condition is a regular and invariable component of a 90-minute human sleep cycle, and has been shown to have a distinctive ontogeny and phylogeny, both of which are clearly related to mammalian evolution.

So lively is investigative activity regarding this third state that the 274 members of the Association for the Psychophysiological Study of Sleep have elected not to make the crucial abstracts of their annual meeting available to members who are remiss in

keeping the association informed of their respective recent works—an index of the members' confidence that a year is not soon likely to pass in which many new parameters of importance to the work of all will be revealed.

THE DETAILS of this research, marked as it has been by a rare opportunity for the conjoined efforts of psychologists, psychiatrists, and physiologists were only to be found until recently in the widely dispersed pages of various esoteric journals, many of them in languages other than English. Now, four book-length reviews of the literature have appeared, each addressed to a different readership, which should make entry into this fast moving field of research feasible for all.

The first was Ian Oswald's *Sleeping and Waking*, the most technical of the four and addressed primarily to the highly trained physiologist. Oswald's book will be valued most by the reader whose background predisposes him to assimilate to methodological schemata. The next was *Sleep*, by Gay Gaer Luce and Julius Segal. Luce, a science writer, and Segal, a clinical psychologist and writer, joined their interests to produce a kind of natural history of sleep and dream research in the decade since the Azerinsky-Kleitman breakthrough. It is a lucid and unusually accurate popular report addressed to lay readers and has dated its creditable predecessor, *The Science of Dreams* by Edwin Diamond. Following apace was David Foulkes's *The Psychology of Sleep*, which stakes out as its special preserve what is becoming known of the various qualities of mentation characteristic of sleep. Foulkes's book was a bit premature in that, as could have been predicted, several findings were reported in the year after its publication which suggest the need for early revision. Nonetheless Foulkes's book will make ideal companion reading to the fourth book, and immediate subject of this review, *The Biology of Dreaming* by Ernest Hartmann.

IN 1965 Hartmann published in the *New England Journal of Medicine* a seven-page article entitled "The D-State

—Review and Discussion of Studies on The Physiologic State Concomitant With Dreaming." This reviewer's first reaction was one of displeasure that still another claim was being made to name this bounding child of many parents. But so deft was the review, and so handy did I find it as a referential baseline that I found myself adopting the term D-State out of gratitude. Hartmann has now extended this article in the form of a 206-page book. It includes a 656-item bibliography, an unusually conscientious index, and scores of exceedingly well conceived and artfully presented charts, graphs, and tables. Addressed unapologetically to the medical profession, the book can nevertheless be read with comparative ease by a psychologist interested in sleep research, because it is no more polysyllabic than is absolutely necessary, and because its organization and exposition are otherwise a model of succinct un-selfconscious straight-talk reporting. It is the best reference work of the four and is organized in so comprehensive a way as to lend itself nicely to periodic future revision and updating.

Doubtless Hartmann will hear criticisms from the more knowledgeable of his colleagues concerning the misleading and presumptive implications of his titles: "The Biology (sic) of Dreaming," and, the "D (for dreaming)—state."

In fact, the subject of dreaming, *per se*, is given extremely slight coverage in the book. For example, only three pages are devoted to the basic question of what psychological functions dreaming may serve. And, for another example, when Hartmann comes to speculate on how it is that the later dreams of the night tend to be more vivid, emotional, and inclusive of early memories than the earlier dreams of the night, he prefers to consider the possible role of the body temperature curve than of certain obvious psychodynamic considerations. Furthermore, the evidence for associating dreaming with various physiologic parameters of the "D-State," while it remains impressive, has never been clean nor simple, and it grows dirtier and more complicated as the results of each new study of "non-rem" or, for Hartmann, "S-sleep" mentation comes in.

Still, I am inclined to give Hartmann his titles. Granted, the book should have been entitled *The Biology of Sleep*, because that is what it is about. But with Thomas as a publisher an author needs to be as much his own salesman as he can, and surely *The Biology of Dreaming* is the more fetching title. In any event the title cannot mislead anyone who reads the text, which is as restrained in its realization of stated intentions as E. G. Boring himself could ask for. Moreover, until the evidence that relates dreaming to the sleep cycle is much tighter than it is likely to become in the near future, those who are more concerned with *why* and *how* we dream than with *when* we dream will have to choose their own assumption. At this writing the alternative is clear: either dreaming is somehow functionally related to the neurophysiological correlates of EEG stage 1 "sleep," or it is not. One can cite evidence for either assumption. I choose to assume the former, not because its empirical base is any more sturdy than that of the latter, but because it gives Freud's theory of dreaming much more exercise, and is therefore more fun.

So, for this reviewer, the "D-State" it is.

More English Piagetiana

Jean Piaget. Edited and with an Introduction by David Elkind. Translated from the French by Anita Tenzer and David Elkind

Six Psychological Studies. New York: Random House, 1967. Pp. xxii + 169. \$4.95.

Reviewed by IRVING E. SIGEL

We all know Piaget. David Elkind, editor and one of the translators, is Professor of Psychology at the University

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of Rochester, and was involved in research using a Piagetian framework when Piaget was still just a name to many American psychologists. He spent 1964-65 with Piaget in Geneva. Anita Tenzer, the other translator, holds a doctoral degree in philosophy from the Sorbonne and one in clinical psychology from Columbia University. She is now a practicing psychologist in New York City.

The reviewer, Irving E. Sigel, Chairman of Research at the Merrill-Palmer Institute, has had a long-time interest in the work of Piaget since his graduate school days at the University of Chicago. His interest is in cognitive development and he has been involved in modification studies within the framework of Piaget's theory.

JEAN PIAGET's work is integral to the body of knowledge of developmental psychology. In spite of the fact that he is often referred to as a genetic epistemologist and in spite of the fact that much of his written work is not available in English, modern developmental psychologists have incorporated many of his concepts and undertaken research replicating his findings. (For those strong advocates of language requirements for the PhD, let me point out that the usual PhD reading knowledge of French is quite inadequate to read Piaget.) The non-French reading professional public, then, is limited in its direct acquaintance with the breadth, depth, and complexity of the Piagetian system. Consequently, additions to the English literature are indeed welcome.

To the growing list of material available in English, we now have six new essays ably translated by Tenzer and Elkind. These essays, previously published in French, represent different facets of Piaget's thought. Although referred to in the title as psychological studies, the pieces are heavy on theory and concept and light on reports of empirical data.

The studies, ranging over a number of conceptual problems, focus particularly on intellectual growth in the context of Piaget's stage theory. The stages of development are reiterated in virtually every essay, with additions and elaborations for particular notions.

The discussion of affect and motivation is a major addition to the English repertoire. Many American psychologists have criticized Piaget for overlooking the significant role of affect and motivation, and working from a logical rational model of man. The essay, "The Mental Development of the Child," contains a succinct and relevant discussion of the role of affect in the development of thought. In fact, affectivity is one of the "indissociable aspects of every action," since "there is never a purely intellectual action, and numerous emotions, interests, values and impressions of harmony, etc., intervene . . ." (p. 33).

The social context in which the child finds himself is a second integral consideration for the development of intelligence. The only conclusion the reader can reach after studying this essay is that Piaget views the development of thought in a psycho-social context. The criticism leveled at Piaget for overlooking affective and social factors can now be laid to rest.

Of significance is *how* Piaget views these dimensions. These essays demonstrate that Piaget operates within a holistic framework wherein intra- and interorganismic processes are occurring.

Equilibrium and the related process of equilibration comes into play as a crucial explanatory developmental concept. The essay distinguishes between the product (equilibrium) and the process (equilibration). For Piaget, this construct is "intrinsic and [a] constitutive property of organic and mental life." The fact that Piaget has used equilibration as an explanatory concept in the pursuit of his cognitive studies does not contradict the centrality this notion holds for him in all organic life.

Origins of logical thought as well as their developmental course is the subject of still another essay. Piaget succinctly, almost too much so, defines his position. The adaptive capability of the organism and the subsequent transmission of these adaptive capabilities is implied. It is the logic of this argument that propels Piaget into a discussion of the determinants of cognitive growth as well as an explanation of the acquisition of logical thought.

These are but some of the issues discussed in this volume. For the non-

French reader well acquainted with the already translated material, this volume will prove of interest and add to his understanding of Piaget.

For the novice, this is by no means an introductory volume. The articles are terse and abstract. The major exception is the initial essay on "The Mental Development of the Child," which contains an excellent over-view of Piagetiana. Of particular value to the initiate, however, is the introduction by Elkind, who by placing Piaget's work in historical perspective, identifies his intellectual forebears as well as his contributions to development psychology.

Children's Images of Self and Others

Wallace E. Lambert and Otto Klineberg

Children's Views of Foreign Peoples: A Cross-Cultural Study.
New York: Appleton-Century-Crofts, 1967. Pp. ix + 319. \$6.50.

Reviewed by WAYNE DENNIS

The first author, Wallace E. Lambert, is Professor of psychology at McGill University. With his brother, William, he is author of *Social Psychology*. His previous research has had to do chiefly with the psychology of language, with special emphasis on bilingualism. Otto Klineberg needs no introduction to CP readers. A social psychologist, for many years a member of the psychology department at Columbia, he is now at the Sorbonne. He has served with UNESCO in Paris and is especially interested in racial and national attitudes.

The reviewer, Wayne Dennis is Professor of Psychology at Brooklyn College of the City University of New York. He considers himself primarily a child psychologist. One of his main re-

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search interests is the development of research techniques that are applicable cross-culturally. This is represented in his recent book, *Group Values through Children's Drawings*.

THIS BOOK is bigger in content than its number of pages suggests. It reports the results of individual interviews, averaging about 45 minutes each, with 3,300 children, 1,100 at each of three age levels, namely ages 6, 10, and 14 years. It deals with many topics and is undoubtedly one of the most extensive "cross-national" studies of children yet undertaken.

It is beyond the scope of this review to discuss the many interesting findings that are reported. But however suggestive the findings, probably the chief value of the book will be to call the attention of subsequent investigators—and there are going to be many—to the problems that face one who does research in this field.

What is the field of cross-national psychology? Lambert and Klineberg are aware of the difficulties of defining what they tried to do but do not really face the problem. For example, their subjects were residents of 10 countries; the United States, South Africa, Brazil, Canada, France, Germany, Israel, Japan, Lebanon, and Turkey. The authors indicate (p. 15) that their subjects come from 11 nations, but two of them are from Canada (French Canada and English Canada), labels which would please DeGaulle, if he were to read this book, a most unlikely event.

While the subjects were from ten nations, more precisely, they were from eleven cities: Watertown (Mass.), Johannesburg, Recife, Montreal, Paris, West Berlin, Jerusalem and Tel Aviv, Kyoto, Beirut, and Istanbul. Within Watertown, so far as we can ascertain, only white subjects were studied. The authors note that a large proportion of Watertown's inhabitants are of Armenian extraction. In Johannesburg, only Bantu subjects were chosen. Obviously only small and selected segments of the United States and of South Africa are represented.

The authors disclaim any attempt to select representative samples, yet headings such as "The American Study,"

"National Profiles," "National Comparisons of Self-Descriptions" occur throughout the book. In a book whose purpose, in part, is to expose the universality of stereotypes it seems unwise to use terminology that itself tends to produce over-generalization from limited samples, even though the total is large.

This book should not be given to a careless reader, because he will find in it statements such as the following: In Israeli children (p. 64) "Ethnic self-identification was practically non-existent." But those who read the whole book carefully will not be misled.

Let us give another example of methodological difficulties exemplified but not solved by this investigation. Although the study was preceded by a pilot study and by a conference on methodology, the initial question put to each child was "What are you?" What a beginning for an interview with a six year-old!

This question was taken from a 1948 study by E. L. Hartley, M. Rosenbaum and S. Schwartz. In the setting in which this question was used by Hartley et al., this question frequently served to reveal ethnic self-concepts. As used by Lambert and Klineberg, however, it seldom did so. Not only did "What are you?" yield but few responses related to racial, national, religious or ethnic groups, it very frequently elicited no verbal response whatsoever. What was wrong with the pilot study?

A finding which may surprise some psychologists is that the American respondents show less prejudice on the Frenkel-Brunswik ethnocentrism test than any other group of subjects. This is provocative, but does it hold only for the Armenians of Watertown? The Bantus of Johannesburg were the most prejudiced group on this instrument. To what extent will this finding be duplicated with other Negro groups? Do we need a redefinition of prejudice?

The book shows that cross-cultural studies by psychologists can contribute data that are very fundamental to the behavioral sciences. The techniques required for such studies are still but slightly developed. The study by Lambert and Klineberg and their many collaborators is valuable because it serves

as a guide post on an unpaved road which is largely unmarked.

Learning Originality

Wilbert S. Ray

The Experimental Psychology of Original Thinking. New York: Macmillan, 1967. Pp. xiii + 208

Reviewed by PAUL R. CHRISTENSEN

The author, Wilbert S. Ray, is Professor of Psychology at Bethany College. He received his PhD from the University of Wisconsin in 1930. He worked as a clinical psychologist at New Jersey State Hospital and as a Research Psychologist with AFPTRC. He has taught at Hillsdale College, Adelphi College, Shrivensham American University, Trinity College, and the University of Reading, England.

The reviewer, Paul R. Christensen, is Senior Research Psychologist with Human Factors Research, Inc., Santa Barbara, California. He supervised the USC Aptitude Research Project for J. P. Guilford from the beginning in 1949 through the early exploratory years and also conducted training workshops in group problem solving at USC. At RAND and at System Development Corporation, he designed programmed materials for system training and, at HFR, most recently directed an ONR Project on translation and application of research in psychology.

MELVIN H. MARX, the editor of the *Critical Issues in Psychology Series*, points out in the Foreword that "the recent revival of interest in thinking has very largely centered on the problem of creativity, or originality, the topic of the present work." This revival is especially noticeable in the research programs being carried out in elementary and secondary education. The other, bigger, and, on the surface, antithetical

trend is programmed instruction. Where can the researchers and practical educators turn for scientific guidance in promoting original thinking among students within these movements? How about Ray's book?

"The main theme of the book," Ray says, "is to attempt to answer the question, can people *learn* to produce new ideas, to be original"? It is his hope that this "experimentally-based brief volume will stimulate student interest and research in the area of original thinking." He presents his own integration of the field in one-half of the book and a selection of readings in the second half that well illustrates and augments the first.

His approach reflects, to an extent, the curious mix of research on originality in thinking. The introduction presents a *Technical Description of Thinking* in which he gives a frankly S-R interpretation of thinking in terms of mediating processes. A chapter follows on *Originality: Laboratory Studies*, featuring the work of Maltzman and of Mednick and including tasks such as free association (quick response), unusual uses and remote associations. The products of Guilford's shop are treated in the chapter titled *Originality: Non-Laboratory Work* (though one of the pioneering "laboratory studies" on the topic of this book was done there, Christensen, Guilford & Wilson, *J. exp. Psychol.*, 1957). In this chapter are discussed divergent-thinking factors and tests from the Guilford project; theory from Hull and from Osgood, with experiments on both rats and humans; and, finishing it off, Osborn's "brainstorming," and Gordon's "syntectics" (interconnecting the familiar and the strange through analogy).

In a chapter on *Production of Hypotheses*, Ray takes the position that original thinking is operant behavior and that its frequency can be increased by reinforcement. If original thinking is operant behavior and valued by the world, Ray asks, why is it so difficult to find originality, especially in school and college work? His reasonable explanation is that ever since the first grade the student has been told that he should think, but he is reinforced only when his thinking produces the "right" answer. Ray recommends that the stu-

dent deliberately sit down and practice the production of hypotheses, with the expectation that the appearance of an original idea will provide a self-reinforcement with a resulting increase in the rate of production of original ideas.

Prominence is given throughout the book to Luchins-like experiments on set and Duncker's hypotheses on functional fixedness. The 15 readings represent a good selection of fundamental work, consisting of both theoretical and experimental extracts. They mainly reflect the content and traditional experimentalist viewpoint of the text. An introspective piece by Poincaré on how unconscious work appears to take place is also included, perhaps to balance off a description on reasoning in white rats by Maier. It was disappointing to find no reference to some rather promising experiments on training children in originality, e.g., the work of Torrance.

The fact is that the research on original thinking has been so diffuse that it is unlikely that anyone is going to bring it all together, sensibly, in a single volume. Ray has done his part by concentrating mainly on efforts of the experimental psychologists, working in their laboratories with a handful of well-worn tasks. Taken together, this kind of experimental work on original thinking has not advanced much beyond that of Luchins and of Duncker in the 40's. Water-jar problems are still the popular vehicle for studying "set." By communicating his close acquaintance with experimental tasks, Ray uncovers the task-limited arena in which the laboratory psychologists are jousting (though this is not Ray's conclusion). The majority of their research was done with half a dozen tasks: water jars; anagrams; a remote-association test; the quick-response, free-association task; unusual uses, and the Wisconsin card-sorting task. These simple tasks, each studied in isolation, can hardly be expected to take us very far in our understanding of creative thinking on complex, real world problems.

It is the opinion of this reviewer that the book will be useful to researchers in psychology and education because it is readable, it holds together, and it pro-

vides a well-founded point of departure. Hopefully, departure from the book will be in the direction of (1) an increase in the number and the meaningfulness of experiments on a topic we know very little about, (2) broadening the laboratory-task base, and (3) providing answers to teachers' questions as to how they can train original thinkers. It is clear that few answers to the teachers' questions on training can presently be found from the experimental literature.

Weltanschauung—Yes, Research—No

Hans and Shulamith Kreidler

Die weltanschauliche Orientierung der Schizophrenen. Munchen/Basel: Ernst Reinhardt Verlag, 1965. Pp. 170. Kart. DM 9.50; Leinen DM 11.50.

Reviewed by ERNST G. BEIER

The first author, Hans Kreidler, was born in Vienna and attended the University of Vienna and Hebrew University, Jerusalem, before obtaining his PhD in psychology from Graz University, Austria. He is at present Associate Professor of Psychology and Chairman of the Department at Tel-Aviv University. Shulamith Kreidler, his wife, received her PhD in psychology from Bern University. She also studied at the Bar-Ilan University, Israel, and is now a Lecturer in Psychology at Tel-Aviv University. The two are also authors of *Die kognitive Orientierung des Kindes*.

The reviewer, Ernst G. Beier, received his PhD from Columbia. He taught at Syracuse University and is at present Professor of Psychology and Director of Clinical Training at the University of Utah. He is interested in communication research and non-verbal

properties of speech. He also collects information on new treatment methods in mental hospitals and last year he spent traveling around the world collecting such information. He is author of *The Silent Language of Psychotherapy*.

THIS ISRAELI husband-wife team has published an interesting and well written report on the question of differences in moral judgment and *Weltanschauung* between normals and a schizophrenic population. The questions are novel and the sensitivity and thoughtfulness of the authors' observations are admirable. Yet, the book is essentially another anecdotal contribution. The authors, sensitive as they are, have voiced many of the criticisms themselves, perhaps with the mistaken idea that once they show awareness of the vulnerabilities of the study it is no longer quite so vulnerable.

They surveyed 40 schizophrenic patients from various hospitals with questionnaires and compared the answers given with those from "normals," equated for sex, age, and education. The moral judgment questionnaires consisted of 29 questions such as: 24) "What is your opinion about the forgery of a prescription? Why?" Another example would be a question which presents two situations and where the subject has to make a moral judgment. The *Weltanschauung* questionnaire consists of such questions as "What is the worst possible deed a person can do?" with the request for open-ended answers.

The authors tally and interpret the answers and come to the conclusion that schizophrenics appear to have greater trouble in orientation in ambiguous moral situations than normals, that their responses do not support an exclusively organic or psychological interpretation of their etiology and that the disorder does not necessarily impair the schizophrenic patient's judgment of right and wrong. Taking cognizance of their data, they state that question of law based on such false beliefs should be re-examined. As results of the *Weltanschauung* questionnaire, the authors conclude that schizophrenics differ from normals in that they create a larger psychological distance between good and evil, that while they hate

prohibitions more than normals, they are willing to accept prohibition with regard to jealousy, aggression, and sexuality. The authors also state that schizophrenics appear to strive for "total" i.e., an undifferentiated, sense of freedom. They want to be famous and at the same time not noticeable, they lack unity between personal and abstract ideals and they are more preoccupied with death.

In an interesting discussion of the application of their findings, the authors discuss their therapeutic work with patients where they reject the "historical" models and stress the importance of intervention with the present day "orientation" of the patient, a position which resembles Ellis's Rational Therapy.

THE trouble with this book is that the authors call it an "experimental research report." It is true we have an experimental group, a control group, and many tables, and the report comes to interesting, fashionable and even thoughtful conclusions based on the questionnaires. But here the similarity with experimental research ends. We are never sure whether the questionnaires measure in fact what they purport to measure. The wording of the question is likely to determine the quality of the answers and so is the examiner relationship, the patient's expectation of outcomes, the sequence in which the questions are presented. Some of the questions in fact have been re-worded for the control group because they did not pertain. The answers, particularly the open ended answers, do not yield objective data easily, and may equally well support different interpretations. The individually matched control group also limits generalization. In other words, the study would hardly be reproducible with a different set of investigators and subjects. Surprisingly very little attention has been given to the label "schizophrenic" (largely, the hospital diagnosis has been used for selection) at a time when this label has been under much debate concerning both adequacy and meaning.

As stated, the authors are aware of some of these problems, but their decision to present the material within a superimposed "experimental research

design" framework strikes me as unfortunate.

Yet, while the book falls short as a research report, one might wish that there was a more prominent place in our own psychological literature for such broad observation and intellectual searching. The American preoccupation with the measurable, desirable as it is, perhaps results in looking too often for the "easily measurable" and disregarding the value of the observations. *Weltanschauung* and moral judgment are clearly significant characteristics of those who live on the fringes of adjustment. Before we can measure such significant but vague characteristics we need to explore, to discuss, and to question. This is precisely the place where the book is of service; with all its faults it is a thoughtful book.

Philomathepsycho- metrics

William W. Rozeboom

Foundations of the Theory of Prediction. Homewood, Ill.: Dorsey, 1966. Pp. viii + 628. \$10.50.

Reviewed by JACOB COHEN

The author, William W. Rozeboom, received a PhD from the University of Chicago and had two postdoctoral years in psychology and in the philosophy of science at the University of Minnesota. He is now Associate Professor of Psychology and a member of the Center for Advanced Study in Theoretical Psychology at the University of Alberta. His major current concerns include the formal structure of psychological theories, philosophy, and methodology of science.

The reviewer, Jacob Cohen, is Professor of Psychology in the Graduate School of Arts and Sciences, New York University. He was originally trained

as a clinical psychologist (PhD 1950, NYU) and did clinical research in the VA for about 10 years. He has veered progressively toward a major interest in research methodology (statistics and psychometrics). He is completing a book for Wiley, Statistical Power Analysis for Behavioral Sciences.

WITHIN the covers of this work one finds two mutually interpenetrated books with virtually non-overlapping audiences: Book A, an intended introductory text in the statistics of prediction, and Book B, an advanced treatment of psychometric theory of much originality and conceptual power. I conjecture that Rozeboom was motivated by B, the publisher by A, and the compromise was a merger in a single binding. The author writes "... all that is needed is a little elementary (high school level) algebra and some receptivity to mathematical thinking ... a reader ... whose prior statistical background is negligible or superficial" (p. 4). This statement is debatable even for Book A (the unstarred material, one-third of the contents), and Book B demands no less "receptivity to mathematical thinking" than characterizes the readership of *Psychometrika*. Such an audience will find this book fundamental, challenging, and idiosyncratic, also amusing and irritating, and consistently rewarding.

The first cornerstone is a long chapter on regression and prediction. Attention to the philosophical-conceptual foundations is thorough, here as throughout. Factor analysis is built up from the regression material, neither matrix algebra nor hyperspace geometry being used. In the chapter on validity, Rozeboom makes a carefully reasoned case for content validity being logically forced to posit a domain-unifying theoretical variable, hence a construct. He argues that construct validity is a central concept in all test theories, unavoidable even for those who would avoid it.

THE second major mathematical tool, primarily for handling reliability, is the analysis of centroids and the variance structure of sets of variables (Chapters 7 and 9, starred, 150 pages containing

510 numbered equations). Rozeboom avoids the cowardly way out of an axiomatic theory of reliability, and confronts the tangled philosophical issues surrounding the concept of "true score" and problems of empirical approximations to reliability. He writes that working with neat internal-structure reliability estimates, given their untenable twin assumptions of uncorrelated errors and a single true-score component, is "like putting on a clean shirt to rattle a hog" (p. 415). He then relaxes these assumptions (Chapter 9), and what emerges in addition to great conceptual enrichment are some very practical inequalities and approximations which pave the way for important empirical investigations. This is the book's highlight and culmination. Like all good philosophers, Rozeboom is an eminently practical man.

Some adverse criticism is in order. The idiosyncratic notation system is a typographic nightmare. I believe that something less complex would gain in accessibility more than it would lose in precision. Be that as it may, Rozeboom has muffed the added responsibility in proofreading which he has incurred. I counted 18 nontrivial and potentially mischievous typos in symbols. Belatedly it has come to the notice of the reviewer that an Errata list is available upon request from the publisher. Second, the prose is frequently unnecessarily obscure. Finally, the exposition would be furthered by more concrete illustrative material (completely absent from Book B), and a higher prose-equation ratio.

Rozeboom approaches his heavy subject with a light heart and a ready, wry, and most delightful wit. Treatises need to be serious, but they do not need to be stuffy. Authors please take note.

This is an important and original contribution to psychometric theory, unique in that it builds a realistic, carefully worked out mathematical structure on the basis of a thoughtfully analyzed conceptual foundation.



A Scandinavian Smorgasbord

Kai von Fieandt

The World of Perception. Homewood, Ill.: Dorsey, 1966. Pp. ix + 418. \$8.50.

Reviewed by RICHARD D. WALK

Kai von Fieandt, the author, is Professor of Psychology at the University of Helsinki. He has worked with Bühler and Egon Brunswick at the University of Vienna and has been visiting professor in this country three times: at Cornell, at the University of Texas, and at the University of Colorado where Michael Wertheimer helped him with this American version of the book.

Richard D. Walk, the reviewer, received his PhD at Harvard and has taught at Cornell. He is now Professor of Psychology at George Washington University. He spent 1965-66 as Visiting Professor at M. I. T. He is in charge of a small program in cognitive and perceptual development at George Washington.

THIS is the first English edition of a book first published in Finnish in 1951, in Swedish in 1956, and again in Finnish in 1962. The Swedish edition was reviewed in *CP* by Per Saugstad in 1958. Michael Wertheimer of the University of Colorado consulted with the author on the English adaptation. The present edition is a new book with many references to recent research.

The main strength of this book is that it brings a European view, particularly a Scandinavian one, to an American audience. Another strength is its broader sampling of perceptual phenomena than is usual in many textbooks.

The topical outline leans heavily on "sensation" in the beginning of the book and shades into topics in perception. The author takes up many topics that are unusual: aspects of the psychology of music, the interaction of sense modalities, tactual perception, the perception of the self. The chapter on the per-

ception of pictorial art I found particularly stimulating.

The book brings the research and viewpoints of such prominent European psychologists as Revesz; von Hornbostel; Rubin; Katz; his teacher, Kaila; and Johansson (not to speak of von Fieandt) into English translation. Its theoretical emphasis might best be described as phenomenal, but the author has also been particularly influenced by the viewpoint of James J. Gibson (von Fieandt spent a year at Cornell and conducted some research with Gibson).

Gibson's emphasis on gradients, particularly in vision but also in other modalities, has particularly influenced von Fieandt. The final sentence of the book reads, "only when a specific quantification of such gradients has been achieved could we permit ourselves to speak of 'gestalten' in a genuinely scientific sense of the word." Although he shows awareness of the importance of motion, the way von Fieandt treats gradients, especially in his chapter on the differentiation of visual-tactual space, is sometimes very static. The emphasis on motion and activity in Gibson is only partially shown here.

Von Fieandt has followed the criticisms of an earlier reviewer (Saugstad) and has tried to bring some American contributions in perception into the book. It remains, however, primarily a European viewpoint. With this in mind, I feel the book can best serve as supplementary to another text or texts. His treatment of subjects like the psychology of music and the psychology of art may help bring a breath of fresh air into the perception course.



... the wife, who was at the outset the drudge and chattel of the man, both in fact and in theory the producer of goods for him to consume ... has become the ceremonial consumer of the goods which he produces.

—T. VELEN



BRFLY NTD

ROBERT M. ALLEN and SUE P. ALLEN. *Intellectual Evaluation of the Mentally Retarded Child: A Handbook*. Beverly Hills, Calif.: Western Psychological Services, 1967. Pp. 67. \$7.50.

The authors describe and discuss several tests that are frequently used in psychological evaluations of mentally retarded children and adults.

ANTHONY DAVIDS

ARNO A. BELLACK, HERBERT M. KLIEBARD, RONALD T. HYMAN, and FRANK L. SMITH, JR. *The Language of the Classroom*. New York: Teachers College Press, 1966. Pp. xii + 274. \$4.75.

This monograph reports the results of a large-scale study of the patterned process of teacher-student interaction. Fifteen twelfth-grade classes studying an instructional unit in international trade were observed and their verbal output tape recorded and coded in an elaborate category system. From these data the authors attempt to construct a model detailing recurring cycles of teacher-student interaction. Because the research and the model based on it is confined to the context of classroom discourse, this monograph will be of greatest interest to educational psychologists and social psychologists concerned with interaction in relatively well-structured settings.

ROBERT M. KRAUSS

C. G. BERNHARD and J. P. SCHADÉ (Eds.) *Developmental Neurology*. (Progress in Brain Research, Vol. 26) New York: Elsevier, 1967. Pp. 258. \$16.00.

This volume contains eight papers, three on the sheep brain and five on the brain of birds. All of the papers but one are by European investigators. One of the papers is of direct behavioral in-

terest. It concerns the relations between somatic motility in the embryo and posthatching behavior (chicken). Most of the papers concern technical matters which are not of immediate relevance to behavior, such as development of evoked somesthetic cortical responses in sheep, neuronal and glial differentiation during embryological development, developmental aspects of biochemical parameters, etc. However, psychologists working on developmental aspects of behavior in relation to maturation of the nervous system will find much useful and interesting material in this book.

GARTH J. THOMAS

KAZIMIERZ DABROWSKI, MD. Introduction by O. Hobart Mowrer. *Personality-Shaping Through Positive Disintegration*. Boston: Little, Brown, 1967. Pp. 304. \$11.50.

This book is an expansion of the author's earlier work, *Positive Disintegration* (reviewed CP 1965, 10, 538-540). Included is a section discussing the personality disintegration of Michelangelo, St. Augustine, J. W. Dawid (Polish psychologist), Clifford Beers, and Jack Ferguson (civic leader and physician). Their personality development is seen as resulting from disintegration and higher integration. The application of methods of disintegration to children and adults is discussed.

BRENDAN A. MAHER

JOEL R. DAVITZ and LOIS JEAN DAVITZ. *A Guide for Evaluating Research Plans in Psychology and Education*. New York: Teachers College Press, 1967. Pp. ix + 38. \$1.00.

Davitz and Davitz have provided a handy guide for students planning their first independent research study. Assuming that such students have already

completed some course work in statistics and research methods, the guide is intended to remind the student of problems likely to be encountered in carrying out research. A checklist of questions about the research plan is included.

WILBERT McKEACHIE

WILLIS D. ELLIS (Prepared by) With an Introduction by K. KOFFKA. *A Source Book of Gestalt Psychology*. New York: Humanities Press, 1967. Pp. xiv + 403. \$7.50.

A welcome reissue of a 1938 volume that has long been out of print, this book contains careful translations and painstaking condensations of some 35 classical German Gestalt works published between 1915 and 1929. It would be hard to find a better, more representative introduction to early Gestalt thought.

MICHAEL WERTHEIMER

ALDEN S. GILMORE and THOMAS A. RICH. Foreword by MARY E. SWITZER. *Mental Retardation: a Programmed Manual for Volunteer Workers*. Springfield, Ill.: Thomas, 1967. Pp. xi + 138. \$5.75.

Using a programmed instructional approach, this book provides information which the authors hope will serve as the basis for favorable attitudes toward the retarded. It is designed for beginning students in areas of special education and mental retardation and for volunteer workers.

ANTHONY DAVIDS

EUGENE HEIMLER. *Mental Illness and Social Work*. Baltimore: Penguin Books, 1967. Pp. 160. \$1.25.

In this book a British psychiatric social worker, widely experienced in all phases of the care of the mentally ill, describes the several outcomes of the 1959 Mental Health Act. The purpose of this legislation was to shift primary responsibility for therapy from the hospital to the community. The author uses case histories and patients' comments to describe in human terms the effect on the treatment of the mentally ill of the newly established out-patient clinics, rehabilitation centers, aftercare services,

hostels, special factories, and other community-based institutions that are features of a "revolutionary experiment."

RALPH HEINE

EDITH JACOBSON, MD. *Psychotic Conflict and Reality*. New York: International Universities Press, 1967. Pp. 80. \$3.00.

For reasons known best to the New York Psychoanalytic Institute and the publishers, a single lecture delivered by Dr. Jacobson as part of a series honoring Freud (on the occasion of his 100th Anniversary?) has been separately published between hard covers. The author offers case history material from her own practice in the framework of psychoanalytic theory to elucidate the management of "psychotic conflict" by patients who often are to external appearances highly successful in their professional careers. The author asserts that in some instances a patient who is basically psychotic can achieve apparent integration as long as he can actually manipulate external reality in areas of his life most closely related to his conflict. This is in sharp contrast to a psychotic solution in which veridical reality is replaced by a fantasy.

RALPH HEINE

GEORGE KENT. *The Effects of Threats*. Columbus, Ohio: Ohio State University Press, 1967. Pp. 113. \$2.00.

The sixth pamphlet in a series produced by "The Social Science Program of the Merston Center (Ohio State) for Education in National Security," this is a lucid but not particularly provocative essay on the role of threat in bargaining processes. The author restricts his interest to the two party bargaining situation and leads off by accepting the Nash solution for the basic bargaining problem: a solution describing the most predictable resolution as that agreement where the product of the expected gain by each party is maximal. The impact of unilateral and bilateral threats on the point of this solution in a two-dimensional expected value matrix is considered. The analysis here incorporates such factors as changes in the probability that an agreement will

be reached at all, the costs incurred in issuing threats, and the credibility of the threat. In the process of describing and formalizing the overlay of threat and counterthreat on the basic Nash solution, the author considers stable equilibrium situations (where threat and counterthreat are bound to lead to mutual agreement), unstable equilibria (where either escalation or de-escalation is the most probable outcome), and escalation situations. The most innovative contribution of the essay is the suggestion of rational strategies for finding points of agreement that are better for one or both parties than the predicted equilibrium agreement.

EDWARD E. JONES

ROY STUART LEE. *Freud and Christianity*. London: J. Clarke, 1948. (Published in Pelican Books, 1967.) Pp. 186.

This book attempts to show "how psychoanalysis can cleanse Christianity of non-Christian elements and give it deeper insights into the true qualities of human life" (p. 9). Five chapters give an overview of psychoanalysis as a therapeutic method and a theory of personality development. Eight chapters follow on what the theory can say of a 'good' and 'bad' religious development. The main thrust is to distinguish a (bad) Superego religion from a (good) Ego religion. The book was, perhaps, a distinct contribution in 1948 toward closing the gulf between religion and psychoanalysis. In 1967 it seems dated not only in its conception of psychoanalysis but also in its theology. Moreover, gratuitous assertions about both the psychological and the theological abound, and this reviewer for one objected to the reification of analytic constructs such as id, ego, and super-ego and the failure to distinguish clearly the psychological from the properly theological.

WILLIAM A. BARRY

R. E. L. MASTERS (Ed.) *Sexual Self-stimulation*. Los Angeles: Sherbourne, 1967. Pp. 352. \$7.50.

The editor who, it should be understood, is not the Masters, has for many years been cranking out volumes on

various sexual topics. The present volume is typical of his output—a somewhat random collection of previously published essays on masturbation ranging from the contemporary viewpoints of Albert Ellis and R. D. Laing, through the classical psychoanalytic literature represented by Fenichel and Stekel, to descriptions of the rather rigorously suppressive attitudes of the late 19th century as embodied in the medical literature of the time. References to classical erotica and descriptions of both ancient and contemporary devices for self-stimulation round out the book. A blurb on the dust-jacket commends the book to the attention of mental health specialists, but it seems unlikely that the editor had a professional readership in mind.

RALPH HEINE

HELEN MOELLER. *Tornado: My Experience with Mental Illness*. Westwood, N. J.: Fleming H. Revell, 1967. Pp. 109. \$3.50.

This short essay is another contribution to the growing list of autobiographical accounts of mental illness. The author's level of discourse is superficially descriptive and blandly reassuring. She treats her psychotic episode as a somewhat mysterious affliction which requires no elucidation either in terms of the stresses of her adult life or of susceptibilities deriving from traumatic experiences in childhood and adolescence.

RALPH HEINE

S. M. MOHSIN. *Elementary Psychology*. New York: Asia Publishing House, 1967. Pp. viii + 205.

Moshin's *Elementary Psychology* is a modest, simply written text covering the usual topics included in the first course in psychology. Those familiar with American textbooks will be conscious of the absence of research citations in this book and the absence of the latest "hot" areas that American authors rush to get into their revisions.

WILBERT McKEACHIE

JOHN PARRY. *The Psychology of Human Communication*. London: University of London Press, 1967. Pp. 248. 30s.

A semi-popular review, with many examples taken from everyday life, art, music, literature, and science, of the implications of the Shannon-Wiener theory of communication for psychology. The author does not seem to be thoroughly familiar with the most recent or the most authoritative work in the oddly-assorted topics he accepts as examples of human communication, but what he does present is generally clear and well written. His catalogue of "barriers to human communication" provides a useful organization for much psychological research, and is probably the best section of the book. Otherwise, the serious student of human communication will find little that is novel in these pages.

GEORGE A. MILLER

A. J. RIOPELLE (Ed.) *Animal Problem Solving: Selected Readings*. (Penguin Modern Psychology Readings, B. M. Foss, Gnl. Ed.) New York: Penguin Books, 1967. Pp. 437. \$1.95.

This volume contains a superb collection of papers regarding observational and experimental data on how animals, particularly primates, solve the problems posed for them by a distinguished list of students of animal behavior. Topically, these papers are divided into eight sections as follows: (1) Historical and Systematic Background, (2) Delayed Response, (3) Tool Using, (4) Gestures, (5) Learning and Problem Solving, (6) Flexibility of Response, (7) Matching, (8) Observational Learning and Imitation. Brief orientations to each topic are provided by Riopelle.

RUDOLPH W. SCHULZ

PAUL M. ROMAN and HARRISON M. TRICE. *Schizophrenia and the Poor*. I.L.R. Paperback No. 3, June, 1967) Ithaca, N. Y.: New York State School of Industrial and Labor Relations, Cornell University, 1967. Pp. vi + 78. \$1.50.

This monograph is, in essence, a report on the bibliographic survey which preceded the design of a hopefully definitive study of the relationship between socio-economic status and schizophrenia. The authors conclude that on the basis of work on this problem thus

far reported, it would be difficult to offer a set of solid facts as a guide for public policy and social action. In carrying out their study of some 450 diagnosed schizophrenics and matched controls (the samples were drawn in Rochester, N. Y.) the investigators intend, insofar as possible, to test a new form of explanation by "combining the patterns of child socialization in the lowest stratum with the patterns of environmental stress and disorganization in the lowest stratum." They regard these factors in combination as providing a better explanation of the high incidence of schizophrenic in the lowest social stratum than any other single factor.

RALPH HEINE

SYDNEY WALKER, III. Foreword by SIR FRANCIS WALSH and PETER H. KNAPP. *Psychiatric Signs and Symptoms Due to Medical Problems*. Springfield, Ill.: Thomas, 1967. Pp. xxi + 299. \$11.50.

Clinical psychologists who practice privately or in a nonmedical setting have always been somewhat intimidated by the possibility that they would, from time-to-time, treat as psychogenic a disorder that is actually organic. They are not alone in these concerns for many psychiatrists, as they become farther and farther removed from whatever expertise they had in internal medicine, also begin to question their capacity to differentiate between transient symptoms that are largely the product of emotional stress and those with organic involvement.

This book purports to be an answer to these anxieties, for it offers a succinct but comprehensive review of disorders at the somatic level that are reflected in psychological symptoms. Providing instant medical wisdom for psychologists and psychiatrists is not, of course, the authors' sole or even primary purpose. Rather, they wish to remind internists of the many serious somatic disorders that are first expressed in essentially psychological or psychosomatic symptoms.

RALPH HEINE



LELAND A. WATSON and THOMAS TOLAN. *Hearing Tests and Hearing Instruments*. New York: Hafner Publishing Company, 1967. Pp. x + 597. \$13.50.

This is a reissue of a volume dated 1949. It provides a thorough compendium of the facts, instruments, and procedures of two decades ago. Audiometry and the hearing aid had by then become fully of age, and during World War II a concerted research effort at Harvard had taken up where the pioneering studies of the Bell Telephone Laboratories had left off. This volume marked the end of what may be called the classic period of research on hearing and hearing aids.

S. S. STEVENS

WILSE B. WEBB. *Sleep: An Experimental Approach*. (The Critical Issues in Psychology Series, Melvin H. Marx, Ed.) New York: Macmillan, 1968. Pp. vi + 250. \$2.50.

An excellent paperback combining a fifty page review and a selection of 13 recent articles. Webb's review covers physiological and psychological aspects of sleep, sleep loss, dreams, psychopathology, and other topics. The articles are well-chosen and include studies by Kleitman, Dement, Snyder, Williams, Wilkinson, Rechtschaffen, Simon, and Webb. A useful supplementary text and the book of choice for the instructor who can devote no more than two or three sessions to sleep and dreams.

EDWARD J. MURRAY

ROBERT ZISKIND (Ed.) *Viewpoint on Mental Health: Transcripts 1963-1965*. New York: New York City Community Mental Health Board, 1967. Pp. xiii + 476.

This volume consists of the recorded dialogue of a number of people, mostly psychiatrists, who were interviewed in New York City on a television program loosely concerned with mental health. Most of the sentences sound like a verbatim transcription of Eisenhower's press conferences, before his frantic writers could issue their corrected versions of what he said. The scrambled syntax, the sentences that go nowhere, the banalities and trite truisms, all add

up to several hundred pages of nothing. I can't imagine anyone reading through this tripe, except perhaps the participants themselves, or an unhappy reviewer.

GEORGE ALBEE

E. ZWICKER and R. FELDTKELLER. *Das Ohr als Nachrichtenempfänger*. 2. Auflage. Stuttgart, Germany: S. Hirzel Verlag, 1967. DM. 48.

This enlarged and rewritten account of the quantitative relations between acoustic stimulus and auditory sensation represents a well-rounded and coherent theory of the way in which the normal ear responds to the basic dimensions of the acoustic spectrum.

The discussion begins with sound and sound fields, both diffuse and anechoic, and progresses through the mel scale of auditory pitch to the authors' major interest, the quantification of the loudness of noise. Zwicker and Feldtkeller use the threshold, both masked and absolute, to construct a system of *Frequenzgruppen* or critical bands. Then, by hypothesizing an intervening variable, excitation, and the notion of specific loudness, they are able to proceed step by step from sound spectrum to stimulation to excitation to specific loudness to integration, and thereby to the determination of the over-all loudness of complex noise stimuli. Zwicker and Feldtkeller base their model almost entirely on conclusions drawn in the Stuttgart laboratory, and their book makes little attempt to integrate their results with functions derived in other settings.

S. S. STEVENS



The body travels more easily than the mind, and until we have limbered up our imagination we continue to think as though we had stayed home. We have not really budged a step until we take up residence in someone else's point of view.

—JOHN ERSKINE



What Difference Does a Difference Make?

Charles W. Telford and James M. Sawry

The Exceptional Individual: Psychological and Educational Aspects. Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. x + 482. \$7.95.

Reviewed by PAUL E. EISERER

Both authors, Charles W. Telford and James M. Sawry, are Professors of Psychology at San Jose State College. Sawry is Chairman of the Department of Psychology. They have a long-standing interest and participation in the problems of learning and adjustment in school and are co-authors of two previous books, *The Dynamics of Mental Health* and *Educational Psychology*.

The reviewer, Paul E. Eiserer, is Professor of Psychology and Director of the Training Program in School Psychology, Teachers College, Columbia. He obtained his PhD from the University of Chicago and has had a long interest in exceptional children; at one time he was Acting Head of the Department of Special Education at Teachers College. He is author of *The School Psychologist*.

HUMAN VARIABILITY is a fact of nature and culture. Each one of us is exceptional in some respect or at least during particular moments of our lives. Our culture prizes diversity, at least in theory, on the assumption that it enriches all of us. Exceptional people, after all, are just like the rest of us, prompted by the same desires, motivations and aspirations.

In the face of such evident truths why write a book about the exceptional individual? Precisely, the authors contend, because some types of exceptionality or deviance constitute social problems; they are troublesome to society. Intellectual, sensory, motor, personality, and social deviances are salient in contemporary culture and constitute the subject matter of this text.

Deviance from a norm may reflect superiority such as the gifted or creative person, who is given adequate attention in this book. But the major focus of the authors is on those negative deviances that are problems in our culture resulting in special study and treatment.

The authors argue persuasively that all forms of deviance are best understood within a cultural frame of reference. "Assets and liabilities are dictated as much by the tasks a culture demands or expects of its members and by the meanings it attaches to deviations from the norm as by the objective facts of exceptionality" (p. 14). They lay the groundwork through a consideration of the historical, socio-psychological, familial and educational aspects of a broad range of deviances which have been for a long time and continue to be irritants in our culture. They search for the common factors that lead people to value some deviations and repudiate others. They discover, as Harry Stack Sullivan once remarked succinctly: "people are more human than otherwise." Concentration on similarities does, indeed, diminish differences just as a focus on differences magnifies them.

THE types of deviance examined in this introductory text are those generally included in other recent texts purporting to provide an overview of the area. Thirteen chapters are devoted to special problems, grouped into intellectual exceptionality, sensorially handicapped, motor and speech handicaps, and social deviance. Since the subject of each chapter contains an extensive literature of its own, selection of material is important. Each chapter includes definitions; extent of problem; facts, theories and interpretations; educational implications; a summary and bibliography. Although a few chapters contain facts in burdensome detail, the over-all balance between facts from significant research studies and interpretation by the authors is excellent. Not all readers may agree with this conclusion for the literature sampled is very extensive and the authors seem more at home with some materials than others.

The study and amelioration of deviance presents us with a paradox. We isolate a deviance, study it and prescribe special treatment. Then we worry about the visibility and perhaps stigma associated with the phenomena and even entertain the fantasy that if we viewed exceptionality as we do the normative it would go away. We can take heart, however, since the paradox helps illuminate the human condition.

The State of the Art in Psychophysiology

Paul H. Venables and Irene Martin
(Eds.)

Manual of Psychophysiological Methods. New York: Wiley, 1967.
Pp. ix + 557. \$12.50.

Reviewed by PAUL A. OBRIST

The editors are both situated in London. Paul H. Venables is in the Department of Psychology, Birbeck College, and Irene Martin is in the Department of Psychology in the Institute of Psychiatry. Both have been primarily concerned with research on GSR, with respect to both technique and its relationship to physiological and psychophysiological processes.

The reviewer, Paul A. Obrist, is Associate Professor of Psychology in the Department of Psychiatry, University of North Carolina Medical School. His 1958 PhD is from the University of Rochester and he spent two postdoctoral years as research fellow at the Fels Institute. His primary interest is cardiovascular function in both humans and animals. Specifically he has been involved in basic research concerning the relevance of cardiovascular activity to behavioral processes.

THIS is an edited book presenting some of the methods used by behavioral scientists in obtaining, record-

ing, and quantifying gross physiological events from the intact organism. It will probably prove to be a valuable supplement for those doing, or being trained to do, research utilizing these techniques. Until now there has been no single source of such information, but another work of this type has since been published (Brown, 1967). Although these books overlap, they also complement each other, and many will find both useful.

This book consists of two types of material. There are five chapters presenting some general principles and techniques applicable to the general problem of recording and quantifying biological data. Of these, the two chapters dealing with visual recording methods, e.g., polygraphs, and telemetering will prove informative. Another chapter concerns basic principles of electronics and is understandable after several readings, although it is questionable whether one can obtain any functional knowledge from such a brief presentation. The remaining two chapters are quite technical and of lesser value. One describes methods of quantifying the amplitude of biological data but pays little attention to the frequency parameter. The other deals with a description of a system for computer analysis of biological signals. This chapter, however, cannot be used as a general introduction to computer technology, a purpose such a chapter would seem to have. Perhaps the most serious omissions, from the viewpoint of the less experienced investigator, are a chapter on general procedures for obtaining clean quantifiable data, including methods used with intact animals, and a chapter on the general problem of data quantification.

THE remainder of the book presents some of the methods used in measuring specific types of biological activity. Although many of the commonly recorded events are covered, there is nothing presented concerning several others such as respiration, gross bodily movements, evoked potentials, cardiac output, and salivation. The formats of these chapters differ somewhat, but typically there is a brief introduction to the physiology of the activity involved, a

survey of the various means by which the activity can be measured, and a fairly detailed account of one specific method with which the author is in most cases actively familiar. In some instances an attempt is also made to discuss the psychological relevance of the measure, but these attempts are beyond the scope of the book and tend to be superficial.

These ten chapters vary considerably with respect to both technical competence and comprehensibility. The chapter on eye movements is perhaps the most competently presented, while those on GSR, the pneumatic plethysmograph, EMG, and pupullography are adequate in most respects.

Perhaps the most serious problem is the emphasis on techniques which may not be as feasible as alternative procedures. For example, the technique described for measuring GI motility is of unestablished reliability, the pupullographic technique is very expensive, the heart rate chapter ignores the many commercially available electronic integrators, and the blood pressure techniques are of limited sensitivity, i.e., too few readings per unit of time. Other problems in these chapters include an incomplete description of data quantification procedures, e.g., the GSR and EEG chapters, and an incomplete discussion of the problems inherent with hi-gain amplifiers required for EMG and EEG.

In summary, certain chapters of this book adequately represent the current state of the art. But one should keep in mind that such methodology is ever changing, largely because many investigators see the various inadequacies of available methods.

REFERENCE

- BROWN, C. C. (Ed.) *Methods in psychophysiology*, Baltimore: Williams & Wilkins, 1967.



Eugenics Quarterly

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By a Pro, About Pros

Douglas McGregor. Edited by Caroline McGregor and Warren G. Bennis
The Professional Manager. New York: McGraw-Hill, 1967. Pp. xvi + 202.
\$6.95.

Reviewed by LYMAN W. PORTER

The author, Douglas McGregor, was Sloan Professor of Management in The Sloan School of Management at M. I. T. at the time of his death in 1964. He was a world renowned leader in the field of industrial psychology. A professor for many years, at one time he was President of Antioch College and he served as consultant to many of the country's largest industrial firms. The editors are his wife, Caroline McGregor, and Warren G. Bennis, a colleague of McGregor's at M. I. T. at the time of his death. Bennis is currently Provost for the Social Sciences and Administration at the State University of New York, Buffalo.

The reviewer, Lyman W. Porter, Professor of Administration and Psychology, and Associate Dean in the Graduate School of Administration, University of California, Irvine, formerly was with the Psychology Department on the University of California's Berkeley campus. He is the co-author of two books in the area of organizational psychology, including the just published *Managerial Attitudes and Performance*.

THIS is a remarkably satisfying book. It was written by perhaps the best known and most respected author in the fields of industrial and organizational psychology, the late Douglas McGregor. Additionally, since the manuscript apparently was not in a completely finished form at the time of his death, it was edited by his wife and by a colleague, Warren Bennis, who himself is an out-

standing authority in these areas. The result of these combined efforts is a first-rate book that will demand attention jointly from academic and managerial observers of organizations.

Although this is a short book, it is concise and cogent and contains a great many trenchant points. Before elaborating on some of these, however, it may be useful to summarize briefly the history of the manuscript as provided in the editors' preface. Most of it was written in the summer of 1964, just preceding McGregor's unexpected passing in autumn of that year. The ideas he committed to paper were those he had been formulating and testing ever since the publication of the world-famous *The Human Side of Enterprise* in 1960. Even with all of this extensive development of his thoughts, he nevertheless was unwilling to regard his manuscript as completed at the end of the summer for he put it away until he could return to it again at a later date for additional refinement. Unless a great deal of editing was supplied by the editors, and this seems unlikely from their comments, the additional polishing was not needed. It was a finished product in the best sense of the term.

In their perceptive preface the editors have aided the reader by calling attention to four themes that seem to run through this book—the importance of theory, the rational-emotive nature of man, the transactional concept of power and influence, and the necessity of learning to cope with differences.

The book opens with a discussion of the manager's view of reality, or in McGregor's terms, his "cosmology." Those who have read *The Human Side of Enterprise* will not be surprised to find that the author continues to be concerned with the assumptions about the world around him that the manager brings to his job. It is here in the first chapter that McGregor begins to stress the several themes noted above, particularly in regard to understanding motivation. In other early chapters he delves into the manager's role in the organization and his style and strategies for meeting its problems. In later sections he moves into more specific tactics in such areas as controls, the exercise of power, and the development of managerial teams. Throughout, there are the evident parallel influences of the Lewinian approach, with its emphasis on the person-environment interaction, and the systems approach, with its stress on the organic and open-ended nature of organizations.

IN evaluating this book an immediate question arises concerning its comparison with the classic *The Human Side of Enterprise*. Personally, I found the present volume a much more mature and thoughtful work. Having used *The Human Side* . . . a number of times in connection with undergraduate classes, I was continually being frustrated by not having the author there to answer the many questions with which both the class and myself wanted to confront him. That book, while obviously provocative, seemed to abound with numerous unproven and unqualified statements. In contrast, in the *The Professional Manager* McGregor seems already to have anticipated this and other criticisms. For example, whereas the earlier book virtually never backed up its points by reference to empirical data, the present one draws frequently on the research literature. (Even in this volume, however, McGregor could not be accused of overdoing it in this respect.) Furthermore, and just as important from this reviewer's point of view, McGregor provides a number of qualifications for the kinds of strategies he advocates. Several examples would be the following:

"Obviously there is no single program or method of organizational planning that will eliminate the difficulties created for every manager by conflicting, unclear, or unintended role pressures."

"Naturally the development of such strategy [i.e., an organic approach to control systems] is an evolutionary process. It would be foolhardy to attempt to shift from a conventional strategy to this one quickly or to involve all managerial control systems at once."

"Some essential characteristics of the organization environment in any industry (the assembly line in an automobile plant is but one example) severely limit the opportunities for the pursuit of *some* [italics McGregor's] human goals. Coercive forms of managerial power are necessary under such conditions. . . ."

"Virtually every variable associated with human interaction may be 'dysfunctional' at both extremes."

None of the above quotations should be taken to mean that McGregor has fundamentally changed his position over the past half dozen years. Nevertheless, they, and particularly the latter two, serve to illustrate the fact that this position is not offered as the ultimate solution for each and every organizational situation. Furthermore, this kind of approach puts the emphasis where it belongs—on the analysis of managerial problems rather than on the rote application of a pre-packaged prescription.

WHATEVER else readers of *The Human Side of Enterprise* came away with, they could not avoid noting McGregor's division of management theory into "X" (the "classical" or traditional approach) and "Y" (the "new theory" based on "the accumulation of knowledge about human behavior in many specialized fields"). In his new book, McGregor not only backs off from this simple dichotomy, but he also de-emphasizes this particular way of thinking about managerial approaches. In fact, the terms are discussed at only one place in the entire book (though they are briefly referred to in two other places). McGregor makes it clear that

he feels that his use of these terms in *The Human Side* . . . was misinterpreted. He states that "it was not my intention to suggest more than that these were *examples* [McGregor's italics] of two among many managerial cosmologies, nor to argue that the particular beliefs I listed represented the whole of either of these cosmologies." Theory X and Theory Y are, therefore, in McGregor's latest view, not opposite managerial strategies, but rather they represent different sets of "underlying beliefs about the nature of man that influence managers to adopt one strategy rather than another." In effect, McGregor has not abandoned X and Y—he has instead downgraded the importance of trying to formulate and label such categories. The new emphasis is on trying to understand the development of managers' beliefs about the nature of man and reality and how these in turn influence strategies for action.

This revised treatment of the so-called Theories X and Y is consistent with the author's discussion of managerial styles—how they emerge, how they are known, and how they change. Followers of Blake's Managerial Grid approach will be interested in McGregor's observations that the Grid provides "a useful if much oversimplified view of a variety of managerial styles," and that "there are gains and losses associated with each style." As I read this section of the book, McGregor seems to be rather critical of the whole "style" approach to thinking about how managers do and should manage. At any rate, his discussion raises several thoughtful issues that need further scrutiny.

In his insightful introduction, Edgar Schein states that: "The present volume grew out of the twin needs to reexplain [McGregor's] own epistemological position and provide a more concrete description of the implications of various sets of assumptions about man." These needs have been more than adequately met. If there were one, and only one, book that I could recommend to a manager relatively unfamiliar with the behavioral sciences, or to a behavioral scientist relatively unfamiliar with management, this would be it. It is broadly educational.

The Many Faces of Psychiatric Services

Bernard Bandler (Ed.)

Psychiatry in the General Hospital.
Boston: Little, Brown, 1966. Pp. xii + 275.

Reviewed by STEPHEN M. WEISS

The editor, Dr. Bandler, has spent the majority of his professional life in the Boston area since receiving his MD from Columbia University in 1938. His primary affiliations included Boston City Hospital, Massachusetts General Hospital, and Harvard Medical School before coming to the Boston University School of Medicine in 1947. Since 1958, he has held the position of Chairman, Division of Psychiatry, School of Medicine. He has published extensively in psychosomatic medicine, psychoanalytic theory and psychotherapy.

The reviewer, Stephen M. Weiss, received his graduate training at the University of Arizona and the University of Oregon Medical School. He has held appointments at the University of Arizona and the Southern Arizona Mental Health Center before going to The Johns Hopkins School of Medicine where he is with the Psychiatric Liaison Service as Instructor in Medical Psychology. His current activities involve research on the psychological aspects of selected medical and surgical problems as well as the investigation of effects of brief psychotherapy intervention in a medical out-patient clinic.

DR. BANDLER is to be commended on his selection of topics in developing the multifaceted role of the psychiatrist in the general hospital setting. Although the general areas of professional activity covered in this text may be divided into treatment, research, and training, the approach taken here is to blend and overlap these areas wherever congruent with good clinical practice.

The psychiatrist is portrayed as clinician, teacher, "learner," and researcher in all areas of hospital functioning. As this particular setting in-

volves a university teaching hospital, the psychiatrist finds himself primarily engaged in communicating psychiatric practice in terms of theoretical formulation and practical psychiatric management to non-psychiatric house staff. Uncovering the emotional concomitants of physical illness to internal medicine interns and residents; teaching diagnostic and psychodynamic formulation to medical students; consulting with family physicians concerning management of psychiatric out-patients; providing research assistance, encouragement, and direction concerning a wide variety of psychosomatic problems; complementing medical rounds by providing opinions concerning the role of emotional factors in the patient's physical illness; all the above are considered part and parcel of the psychiatrist's role model within the general hospital setting. Perhaps the single most important contribution of the psychiatrist in such a setting may be summed up as that of stressing the holistic approach to the individual patient, "... the psychological and social dimensions of behavior as well as the biological."

The psychiatric in-patient service within a general hospital setting provides many teaching opportunities with general medical staff, as well as considerable social and economic advantages to the patient himself. The patient's family physician is able to maintain direct contact with the patient through collaboration and participation in the treatment program. This provides invaluable continuity in patient care and serves an important teaching function by allowing the non-psychiatrist direct exposure to psychiatric procedures. Finally, this process is far less psychosocially disruptive to the patient than would be the case were he sent to a state hospital.

This volume also serves the purpose of providing a comprehensive guide for establishing psychiatric services in the general hospital. All phases of in-patient, out-patient, child, adult, and consultative services are thoroughly discussed within the psychoanalytic model. It would appear that any other theoretical bias could be superimposed with little difficulty on the structure as outlined by Bandler and his associates. In short, anyone considering development

of a psychiatric unit within a general hospital setting would be well advised to evaluate the programs as outlined in this text.

PERHAPS the most telling criticism of this work can be found in its essentially traditional approach to issues of interdisciplinary concern. The psychiatrist tends to operate within traditional boundaries with respect to other mental health disciplines, particularly in the areas of research and psychotherapy. This last point of unidimensional professional development within a multi-professional milieu involves allied disciplines being narrowly defined and circumscribed within traditional boundaries of evaluation and treatment. Except for the isolated instance, little apparent use is made of the many skills of social workers, psychologists, occupational therapists, nurses, and psychiatric aides, among others, within the many treatment, training, and research settings described. Although the role of the psychiatrist has been imaginatively conceived within these various settings, allied professionals and their associates do not appear to have profited in similar fashion.

From the standpoint of the psychologist, "psychological testing" appears overemphasized in comparison to treatment and training functions. Although research ostensibly is a primary function of the psychologist, there appears to be little anticipated collaboration with psychiatry, as indicated by the absence of any reference to psychology in the chapter on psychiatric research. This is all the more curious in the light of Bandler's introductory remarks which indicate seventeen of the twenty-one psychologists on the hospital staff to be engaged in research.

It would appear that considerable professional encapsulation thus exists within the broad area encompassed by mental health activities. Greater recognition of the assets and skills possessed by other persons engaged in these activities would assuredly stimulate development of new, more dynamic role models, perhaps better tailored to the needs and capabilities of the various professions represented.

Psychology Dubiously Spared?

Edmund W. Gordon and Doxey A. Wilkerson

Compensatory Education for the Disadvantaged: Programs and Practices: Preschool Through College. New York: College Entrance Examination Board, 1966. Pp. 299. \$4.50.

Reviewed by JAMES O. MILLER

Both authors, Edmund W. Gordon and Doxey A. Wilkerson, are now at the Ferkauf Graduate School of Humanities and Social Studies, Yeshiva University. Gordon is Chairman of the Department of Educational Psychology and Guidance and Wilkerson is Associate Professor of Education. Gordon also heads the Information Retrieval Center on the Disadvantaged and until recently was national research and evaluation director for Project Head Start. His EdD is from Columbia. Wilkerson has been active for over 40 years in teacher education, curriculum development, and education for disadvantaged children. He has held positions at Howard, Bishop College, and Jefferson School of Social Science. His PhD is from NYU.

The reviewer, James O. Miller, taught in elementary schools before receiving his PhD from George Peabody College. He initiated an intervention research with culturally disadvantaged Mexican-American children at San Jose State College before returning to Peabody where he is now Associate Professor of Psychology and Director of Research for the Demonstration and Research Center for Early Education. He is co-author of *Before First Grade*, a report on the Early Training Project.

IN their review of compensatory educational programs for the disadvantaged, Gordon and Wilkerson compile a devastating case that efforts in this field "have suffered from one fundamental difficulty—they are based upon sentiment rather than on fact." They present

their case in a disarming way. After carefully laying a theoretical basis for compensatory education placed in the context of an historical and social challenge, they faithfully report the results of an inquiry into present day compensatory programs in our schools and universities. This inquiry covers the techniques and practices in use and their rationale. Sponsored by the College Entrance Examination Board and the National Scholarship Service and Fund for Negro Students, two extensive field surveys of public school districts and institutions of higher learning provided the data for analysis. In order to handle the mountainous materials that such a survey produces, the authors categorize and report according to the focus of project impact; innovations in school programs, staffing patterns, preschool programs, in-service education for teachers, drop-out programs, community involvement, compensatory practices in colleges and universities.

From unimaginative shuffling of schedules, guidance and counseling programs for potential drop-outs, to developing the school as a catalytic agent for marshaling services in community efforts for the disadvantaged, the range of activity is impressive. The authors chronicle all that is being done in these endeavors without editorial comment. The reader's anxiety grows that this is just another compilation of educational practice designed to whitewash the establishment, our consciences or both. Finally, Gordon and Wilkerson present their critique. They heartily agree that the variety of ideas for improving the effectiveness and the range of programs that have been designed and implemented is impressive. If the amount of enthusiasm that has been generated and the ensuing activity were legitimate criteria for success, then the battle has been won. There is the rub. Most of what is being done is in keeping with the tradition of unscientific innovation in the school systems. "Despite the almost landslide acceptance of the compensatory education commitment, we find nowhere an effort in evaluating these innovations (appropriately)..."

Gordon and Wilkerson point out that most of the programs have been designed to change the child to fit into a

mold with which traditional educational methods and practices has been moderately successful. Little effort has been made to change the system itself to be able to assimilate the child more effectively. Nor has the system been able to keep pace with a changing society. Societal changes not only will have an effect on the majority now served adequately by the schools, but will have a much more profound effect upon disadvantaged groups.

The charge is broad and sweeping, not sparing the educational audience for whom the book is primarily intended. Gordon and Wilkerson risk the impact of their critique, however, for it can be rationalized as just another attack on the schools. Unfortunately, the psychological community is spared. It is psychology which has the tools to mount an effective program of evaluation and to help in finding answers to the core problem that the authors identify. They point out that little is known about the relationship between conditions of life, characteristics of the learner, and success in the teaching-learning process which must be the foundation upon which adequate programs are developed. This is clearly within the domain of psychology and speaks eloquently concerning the state of social responsibility in behavioral research. For the researcher brave enough to dirty his hands with field research, the authors provide a state-by-state directory of compensatory practices which is a fine shopping catalog. They recognize the limitations of such a directory in a field so quickly being cultivated, but getting dirty hands may be compensated by the lush green that is already there as the directory documents.



Our own unhappiness makes us more sensitive to the unhappiness of others. When someone is unhappy, his sensitivity is not scattered; it becomes tense and concentrated.

—DOSTOEVSKY



Catholic Colleges' Amorphous Shape

Robert Hassenger (Ed.) With a foreword by David Riesman

The Shape of Catholic Higher Education. Chicago: University of Chicago Press, 1967. Pp. 378. \$8.95.

Reviewed by JAMES W. TRENT

The editor, Robert Hassenger, received his PhD from the University of Chicago. He is at present Assistant Professor of Sociology and Education and Director of the Office for Educational Research, University of Notre Dame. He has contributed articles or book reviews to many publications and has a chapter in *Academic Freedom in the Catholic University* (Manier and Houck, editors) and in the forthcoming *Catholics U.S.A.: Perspectives from the Behavioral Sciences* (Liu and Pallone, editors).

The reviewer, James W. Trent, received his PhD from the University of California, Berkeley, and for the last several years has held a full-time research appointment as a Project Director at the Center for Research and Development in Higher Education, Berkeley. He has two books just published: *Catholics in College: Religious Commitment and the Intellectual Life* and *Beyond High School: A Study of 10,000 High School Graduates*.

AMERICAN higher education is in the throes of self-criticism, evaluation, and attempts at innovation. Catholic higher education, in the past alienated and defensive, is as involved in the process of examination and change as its secular counterpart. Robert Hassenger and his associates have contributed a volume that supplements the work of social scientists who have helped to illuminate the character of American colleges, their faculties, and students. It is especially relevant to the recent efforts of Donovan (1964), Greeley (1963, 1967), and this reviewer (1967) who have focused on the Catholic college scene specifically.

The authors' delineation of the intellectual perimeters of Catholic higher education reveals that its shape is amorphous and changing. Chapters by Philip Gleason and Paul Reiss provide a background of historical and organizational factors bearing on the current status of Catholic higher education.

John Leo, Julian Foster, and Francis Kearns highlight the problems of academic freedom in the Catholic college environment, although highhandedness and unilateral decision-making are not exclusively Catholic college problems. Robert MacNamara considers the education of the priest-scholar, discussing the updating of seminary education now underway. But, unfortunately, he says nothing of the formation and moral tension affecting the priest as scholar.

Robert Weiss's lucid chapter on the climates of numerous Catholic institutions (determined primarily from College Characteristics Index and College and University Environment Scales data) shows that students in Catholic colleges perceive their institution as considerably lacking in intellectual awareness and scholarship. Hassenger's and Foster's accounts of two self-studies reveal differences in intellectual disposition and religious temperaments among Chicago women from different ethnic backgrounds and the relative lack of development of critical thinking and tolerance on the part of Jesuit university men in California. Hassenger's extensive review of psychologically oriented research adds further evidence that Catholic colleges have been more successful in maintaining the religious beliefs of their students than in fostering their intellectual interests and autonomy.

Hassenger found some evidence of change in intellectual orientation among women in one Catholic college. Most of the data cited by him and his colleagues, however, indicate that Gleason's and Reiss's optimistic opinions, that Catholic colleges have attained the intellectual level of secular colleges, are premature, even if prophetic. Greater deference throughout could fruitfully have been paid specialists through more precise discussion of research methodology and statistical significance without alienating the lay reader.

A study of higher education must not focus only on the characteristics of its components—faculty, students, and administration. Examination of the interaction among these components is crucial if inquiry is to encompass the broader, telling issues: What really determines the shape of Catholic higher education? Is it the students, the faculty, the administration, the hierarchy, religious beliefs, the particular type of college or form of organization? Or is it the interaction of some or all of these elements? Such questions are difficult to answer, especially in a book that speaks with many voices.

Guidelines for the future of Catholic higher education are desperately needed. Editor Hassenger acknowledges that he is not a seer; it is probably inevitable at this time that his guidelines are sketchy. But a few are provocative and deserve consideration. An example is the proposed "Catholic University of Chicago" satellite college system.

Catholic higher education must do more than it has to examine its role and procedures in contemporary American society. Hassenger's book is a contribution toward this end, particularly from the point of view of the educator and scholar interested in the sociology and social psychology of education. Higher education is now receiving much needed attention from social psychologists. It deserves more.

Adjustment: A Fresh Look

Lee Sechrest and John Wallace, Jr.
Psychology and Human Problems.
Columbus, Ohio: Merrill, 1967. Pp.
xvi + 625. \$8.50.

Reviewed by F. KENNETH BERRIEN

The first author, Lee Sechrest, is currently Associate Professor of Psychol-

ogy at Northwestern except when he is studying culture, personality, and social processes in the Philippines, Colombia, or Pakistan. He co-authored two earlier books: *Unobtrusive Measures* and *The Psychology of Behavior Change*. The second author, John Wallace, Jr., recently moved from Stanford to the University of California at Irvine where he is Associate Professor. Although academically he is a personality-social psychologist, he describes himself as a jazz-musician-composer who dabbles in academics.

The reviewer, F. Kenneth Berrien, is Professor of Psychology, Rutgers University. His PhD is from Ohio State University and he has had a varied career, including teaching at the University of Pennsylvania and Colgate University, research director at the Institute of Human Relations, and a stint as a psychologist for the U. S. government. He is author of *Practical Psychology*, and *Human Relations: Comments and Cases* and co-author with M. Brown and D. Russell of *Applied Psychology*. Forthcoming is *General and Social Systems: From Molecules to Nations*, "a brash but non-applied book dealing with adaptations of social systems."

THIS BOOK is not about the great human problems of our day—poverty, education, the violence in our cities and abroad, or the conservation of human resources. Its spotlight is on the individual. One wonders why the authors rejected as a title, *The Psychology of Adjustment*, especially when the lead sentence of the book reads, "In some respects, it can be said that 'adjustment' is what psychology is all about." If that term is too prissy, too laden with connotations of a pallid placid hedonism, then the professional establishment needs to re-emphasize the term's scientific legitimacy—which in large measure this book does.

In spite of the authors' prefatory statement that the book might be used in introductory courses, the level of discourse would seem to be better suited to advanced undergraduate, and early graduate courses, concerned with personality and clinical issues. As an example, Chapter 2, "Dimensions of Ad-

adjustment Constructs," is a mature exposition of the relevant, basic metaconstructs pitched at a level just short of a *Psychological Review* article. Parenthetically I would have preferred here a more explicit definition of adjustment than merely a process, and further, a set of evaluative criteria of greater utility. However, the conceptual problems inherent in establishing both benchmarks are thoughtfully developed. It is a rare book that meets all the readers' needs.

Around the adjustment theme the authors have woven, as their lead sentence promises, a goodly fare of topics ranging from genetics and physiology including recent materials on the DNA and RNA (the longest chapter) to ecological theory of memory and cultural factors. In between one finds entire chapters on the self-concept, learning, and motivation, and the various techniques of intervention emphasizing shaping and behavior therapies. In selecting their materials, the authors display a healthy disregard for conventional academic boundaries and the constraints of strict, logical positivism. One finds insightful single observations cheek by jowl with the results of impoverished, tightly controlled laboratory studies, extrapolation from which, to the more complex ecology of everyday living is sometimes, but not always, done with caution and qualification.

THIS is a fresh approach, highly readable in style, but in places eschewing respected and familiar concepts. For instance, they declare themselves unsympathetic with the time-honored defense mechanisms, I think for justifiable reasons, and propose instead two chapters on the tactics and strategies of adjustment that carry a strong rational rather than emotive overtone, as if the adjustive choices were not much different from the decision-making processes à la game theory. They even weave in some of Erick Berne's *Games People Play*. Nevertheless in various ways they discuss denial, reaction formation, rationalization, projection, etc. Sechrest and Wallace are best when they pose an issue, review the pro and con studies, interpret the data, and

often let the reader draw his own conclusions.

The chief conceptual weakness, from my standpoint, resides, as the book's lead sentence suggests, in the imprecision of the adjustment construct embracing, as it does, nearly all of psychology. Any response can be viewed as an adjustment, with the consequence that the term loses any definitional or descriptive uniqueness. This perhaps is an accurate reflection of the term's current usage, which in turn may account for its cloudy status among our psychonomic colleagues. If the term were limited to those non-routine and non-reflexive processes having bio-psychosocial consequences for survival, we could narrow the range of phenomena thus included and still be left with a rich variety.

In spite of this caveat, and the graceless typography, this is a scholarly, mature, textbook written in a sometime sprightly, never dull, style that will teach advanced students a good deal and provide challenges enough for any knowledgeable teachers.

Renaissance in Research on Delinquency

John Janeway Conger and Wilbur C. Miller with the assistance of Robert V. Rainey, Charles R. Walsmith and the staff of the Behavior Research Project

Personality, Social Class, and Delinquency. New York: Wiley, 1966. Pp. viii + 249. \$7.95.

Reviewed by HOWARD A. MOSS

The first author, John Janeway Conger, is a Yale-trained psychologist who is now Dean of the School of Medicine at the University of Colorado. He is author with Mussen and Kagan of *Child Development and Personality* and editor, with the same two men, of *Readings*

in *Child Development and Personality*. The second author, Wilbur C. Miller, is Vice-Chancellor for Academic Affairs and Professor of Psychology at the University of Denver. He is also co-director of the Behavior Research Project, University of Colorado Medical Center.

The reviewer, Howard A. Moss, received his PhD in clinical psychology from Ohio State University and for ten years has been active in longitudinal and developmental research at Fels Research Institute and then at the National Institute of Mental Health. In addition he has taught at Antioch College and Syracuse University. He coauthored, with Jerome Kagan, *Birth to Maturity*, a book that won the Hofheimer Award from the American Psychiatric Association.

THIS BOOK constitutes an important addition to the existing list of major studies on juvenile delinquency. In the tradition of Shaw and McKay, Healy and Bronner, and Glueck and Glueck, but employing more sophisticated statistical models, the authors conducted a straightforward empirical analysis of some of the psycho-social factors associated with delinquency.

In enterprising fashion Conger and Miller derived a large scale longitudinal assessment of the early personality characteristics of delinquent males. They accomplished this by first locating all the boys in the Denver, Colorado, area who had records with the Juvenile Court and also were enrolled in the tenth grade in one of the metropolitan public schools at the time of the study. As it turned out this delinquent sample had a modal age of 15 at the time of their first offense. They then studied the annual school records kept on these boys and used both the ratings and comments of their teachers as the basis for assessing their antecedent psycho-social status. Personality measures, such as leadership ability, attitudes toward authority, acceptance of responsibility, adjustment to peers, and impulse control were derived from this material for the third, sixth, and ninth grade levels. The ninth grade assessment was supplemented by four hours of group psychological testing consisting of self-report inventories and projective techniques. Equivalent

data were collected on a matched sample of nondelinquents. Comparisons on the personality measures were made between the delinquents and nondelinquents at each age level and for three intellectual and two social class subgroups, employing analysis of variance procedures.

The personality characteristics manifested by the delinquents vary considerably, and on occasion even shift direction, for different subgroup classifications. Indeed, the strongest point the authors attempt to make in presenting their findings is that the relation between personality and delinquency varies as a function of IQ and social class membership and that one should be cautious in generalizing from pooled data. The results of their subgroup analyses are too extensive and complex to summarize adequately here. However, as an illustration we can cite their finding that deprived children (regardless of their delinquency status) and nondeprived nondelinquents tended to be rated as better adjusted if they had higher IQ's whereas the nondeprived delinquents with higher IQ's were evaluated as being less well adjusted. In addition to these kinds of results, based on analyses of subgroups, many of their findings tend to replicate those results of earlier studies. That is, delinquents had lower IQ's, came from more disadvantaged backgrounds, showed greater rejection of authority, were more distractible, etc.

SINCE, as the authors acknowledge, juvenile delinquency is a sociolegal concept, the relation of personality patterns to delinquency may vary among different socioeconomic and intellectual subgroups, not only because of unique psychological patterns, as was emphasized by Conger and Miller, but because of social circumstances that determine which members of a given subgroup tend to be labeled as delinquent. For example, economically advantaged boys who engage in antisocial acts may be partially insulated from court action (because of their preferred social status) and this could result in only the more recalcitrant and intractable members of this subgroup being identified by the

courts as delinquent. On the other hand lower IQ boys might be more quickly apprehended because they are less resourceful at avoiding detection, and thus non-motivational factors could strongly determine the personality composition of this subgroup. Possibilities such as these could have been more fully developed in the book.

Another contribution of this work was the use of antecedent data for tracing the developmental course of personality functioning, starting with early childhood, among boys who are later identified as delinquent. From this analysis the authors were able to show that several of the personality traits that differentiate between delinquents and non-delinquents, such as "regard for persons," "sense of responsibility," and "social acceptability," are evident at quite a young age. Of course, one complicating feature here is that many of these boys may have been labeled as delinquents by their teachers when younger, but had not qualified for the legal criteria of delinquency as employed by the authors until they were older. Indeed, the Gluecks' studies show that delinquents usually initiate their anti-social careers during pre-adolescence.

This is a methodologically sound study. The treatment of data is thorough and effective for elucidating various patterns of delinquency and the authors' analysis by subgroups provide a valuable extension to the previous work in this area.

The Seventh Proposition

Shulamith Kreitler

Symbolschöpfung und Symbolerfassung: Eine experimentalpsychologische Untersuchung. München/Basel: Ernst Reinhardt Verlag, 1965. Pp. 215. Kart. DM 20.—; Leinen DM 22.50.

Reviewed by ALI A. LANDAUER

The author, Shulamith Kreitler, is Lecturer in Psychology at the Univer-

sity of Tel Aviv. Her PhD is from the University of Bern where she studied under Meili. For more about her see p. 407 of this issue.

The reviewer, Ali A. Landauer, started his studies of psychology at age 35 after a successful commercial career. His 1965 PhD is with W. M. O'Neil at the University of Sydney. He is now Lecturer in Psychology at the University of Western Australia. His major interests are in perception, sensory processing, individual differences, methodology and the history of psychology.

A CRITICAL READER of Dr. Kreitler's report of her experimental investigation of symbol formation and symbol interpretation would undoubtedly ask himself why more time and thought was not spent on planning the study before gathering the data. Nevertheless, should a serious investigation be rejected just because it has both methodological and theoretical shortcomings, to some of which the author herself refers? This reviewer does not think so, because some of the spade work which Dr. Kreitler undertook may well generate more and better research in an area, that, by its nature, does not lend itself to experimental investigation. Research into peripheral fields of psychology demands and attracts investigators who frequently are disinterested in the scientific rigor that contemporary experimental psychology espouses. Dr. Kreitler's book has somewhat of a nineteenth century flavour: both in its experimental method and in its style of reporting.

Three groups of subjects, creative and performing artists, hospitalized schizophrenics, and 'normal' people were given specific instructions to symbolize various concepts. From the verbal responses received the author was able to establish ten response categories, and it is her tenth category which defines the true symbol. Influenced by Jungian theories, Kreitler maintains that the symbol differs from the metaphor, for although like the latter it illustrates the concept by a concrete representation taken from another domain, the symbolic representation must contain numerous aspects of the concept, of which at least one expresses a contradiction which must also

be resolved. Thus, according to this definition, the symbol both sets and solves the problem. The delineation of the ten response categories seems adequate and a figure that can be viewed as a gross measure of inter-rater reliability is reported.

Some evidence is presented that shows symbol formation develops as a chain process, and that there are differences between the three groups of subjects. It is particularly in this area that the study has methodological shortcomings that prevent the author and the reader from interpreting the data unambiguously.

When three similarly constituted groups of subjects were asked to interpret relatively concrete concepts whose symbolic properties had previously been reported in fantasies, dreams, or mythology, it was found that these interpretations could also be arranged into ten categories, that were essentially similar to those found in the earlier study. Again the finding that there are similarities between symbol formation and symbol interpretation are not fully explored.

To demonstrate that symbols express both a contradiction and its resolution, Dr. Kreitler extended her study and presented various geometrical figures to artists, schizophrenics and 'normal' subjects. While it seems eminently reasonable to postulate that concepts—and perhaps even visual stimuli—that contain a contradiction and its resolution would lead to greater symbolization, it is not at all clear why a 'complex good figure' (in the Gestalt sense) should be more frequently associated with conflicts and contradictions than a 'simple good figure.' It is particularly in this series of experiments, and in the attempt to relate the findings to personality assessment and psychopathology, that the argument rests on too many unverified and unverifiable assumptions.

One of the major achievements of the study is to give an adequate definition of symbol formation in a field in which there exists a great deal of semantic confusion. Her definition of a symbol may appear somewhat narrow, but the examples cited justify the delineation into the categories used. For instance, as far as symbol formation is

concerned, of the 7480 responses given by 104 subjects, only 213 were classified as symbols, and half her subjects failed to give a single symbol response. As expected, the tendency to symbolize was highest among artists and lowest among 'normals.'

The compact review of the extensive literature is very adequate and a valiant attempt is made to relate symbolization in philosophy, anthropology, mysticism, and depth psychology to the experimental investigation. It is this attempt which gives this monograph a breadth that is rarely found in contemporary psychological writings.

Shulamith Kreitler concludes her book with a slight variation of Wittgenstein's seventh proposition "whereof one cannot speak, thereof one must be silent" (*Tractatus Logico-Philosophicus*). Some readers might feel that this proposition was only belatedly applied.

Measurement Swedish Style

David Magnusson. Translated from the Swedish by Hunter Mabon

Test Theory. Reading, Mass.: Addison-Wesley, 1967. Pp. x + 270. \$8.50.

Reviewed by FREDERICK B. DAVIS

David Magnusson, the author, is Professor of Psychology and Head of the Unit of Applied Psychology, University of Stockholm. The book is a translation of the second edition of Testtheori, originally published in Sweden in 1961. Magnusson is also the author of A Study of Ratings Based on TAT. He was President of the Swedish Psychological Association, 1961-62.

The reviewer, Frederick B. Davis, received an EdD from Harvard in 1941. He is now Professor of Education and Director, Educational Research and Service Bureau in the Graduate School

of Education, University of Pennsylvania. He has published in the area of measurement, including Item-Analysis Data, The AAF Qualifying Examination, and Educational Measurements and Their Interpretation. He has just completed a study of language teaching in the Philippines and a study of comprehension in reading as well as many test series.

IN CHAPTERS 1-4, Magnusson accurately defines and discusses basic concepts of measurement. He includes brief, but exceedingly valuable, illustrations of the principles of item selection used to obtain interval measures under certain limiting (and, as he points out, practically unobtainable) conditions. The principles of item selection are stated so early in the book that they must necessarily be general and, therefore, of limited practical utility. Similarly, the discussion of the composition of test variance in chapter 4 is not carried to its most important practical application: making the contributions to total variance of the sections of a test approximate their judged importance in the test outline. In fact, the need for, or preparation of, a carefully constructed test outline is not considered in this book.

Chapters 5-9 deal with reliability and accuracy of measurement. Whether beginning students will find the several definitions of reliability given on pp. 60-67 helpful, the reviewer is not sure. There seems to be a muddiness of definition illustrated by the summary statement on p. 67. A similar muddiness obscures the concept of the standard error of measurement. Magnusson states on p. 79 that the standard error of measurement in classical test theory is necessarily "the same for every individual who takes the test and is independent of the true scores." The fact is that, in classical test theory, different standard errors of measurement can be obtained for examinees at various levels of obtained score on a test. Such data were routinely published by the Cooperative Test Service during the 1930's. The interpretation of an obtained score in terms of its standard error of measurement given by Magnusson on p. 80 seems needlessly imprecise. He writes: "With approximately 95% certainty we

can expect his true score to be within a distance of $1.96 s_e$ from his obtained score."

Magnusson's material in chapter 7 on the reliability of difference scores should be extremely helpful in clearing up the confusion that appears to exist in the minds of some test users about the proper uses of the standard error of a difference and of the standard error of measurement of a difference.

CHAPTER 9 includes excellent rationales and computational illustrations for procedures commonly used in estimating test reliability. These are linked together with admirable clarity. Chapters 10-13 treat test validity and associated problems of prediction, selection, and classification. The material is well chosen and clearly presented. Chapter 14 considers item-analysis data and their use. Several statistics for expressing test-criterion relationships are presented and one statistic (the percent of the examinees who mark an item correctly) for expressing item difficulty is given. No suggestions are offered for converting these statistics to indices that constitute more nearly interval scales or for handling the problems that usually arise in practical item-analysis work, such as failing to mark items because of indecision or because of lack of time and marking of items at random. Suggestions for coping with real problems like these and that are based on practical experience can be very helpful.

The use of item-analysis data is touched upon. Although the basic test theory that underlies the use of difficulty and discrimination indices obtained from item analysis is not given, procedures for maximizing test validity (when item-criterion as well as item-test correlations are available) and for maximizing test efficiency at a preselected cutting score are illustrated. A comprehensive discussion of the effects on test-score distribution of selecting items according to difficulty and intercorrelation would have been helpful.

Chapter 15 deals with guessing on multiple-choice tests. The conventional correction equation is derived but the practical effects of violations of the assumptions underlying its derivation are

not discussed. Except for Lord's excellent report of 1963, the important research studies in this field are not mentioned. To the reviewer, the summary of Lord's study is somewhat misleading.

The last chapter takes up scales, transformations, and norms. Linear and area transformations are discussed, especially normalization. The combination of samples and graphic procedures, which are usually indispensable for estimating extreme values of normalized standard scores, are not mentioned. Although Magnusson carefully and correctly identifies T-scores as normalized standard scores, he does not point out that they are, strictly speaking, normalized standard scores in a representative sample of American 12-year-olds (as originally defined by their inventor, Dr. McCall). A more egregious error in chapter 16 is the labeling of percentile ranks as percentiles (which are actually raw scores). Altogether, the contents of chapters 15 and 16 are such that one can safely skip over them without losing much.

In summary, the reviewer finds *Test Theory* to be uneven in quality; its best chapters should prove to be useful in psychometrics or test-construction courses. The book is attractively printed and bound. Special commendation should go to the translator and to the illustrator who prepared its many graphs and charts.

Three for the See-Saw

Joachim Flescher

Dual Therapy: Triadic Principle of Genetic Psychoanalysis. New York: D. T. R. B. Editions, 1966. Pp. 560. \$18.00.

Reviewed by IDEN Z. GOODMAN

The author, Joachim Flescher, is Director of the Dual Therapy and Research Bureau. He has been, at one time or another, Editor of *Psychoanalysis*, Rome; Training Analyst and Member

of the Council of the Italian Psychoanalytic Society; Assistant Clinical Director, Chief Psychiatric Consultant and Advisor in Training, Madeleine Borg Child Guide Institute; Director of Psychotherapy, Linden Hill School; and Lecturer, Department of Psychiatry, Albert Einstein College of Medicine. He is author of *Mental Health and the Prevention of Neurosis*.

Iden Z. Goodman, the reviewer, is Assistant Professor of Psychology at San Francisco State College. He received his PhD in clinical psychology in 1966 from the University of Michigan. His dissertation, entitled "The Influence of Parental Figures on Schizophrenic Patients" was co-winner of the 1966 Marquis Award for the most distinguished dissertation in psychology at the University of Michigan. His main interests are in schizophrenia, graduate level clinical training, and psychotherapy. He has a private practice.

FROM the title of this book I anticipated the proffering of one more illusory panacea to frustrated professionals and the mental health conscious public. At the conclusion of this costly over-priced, tedious, but sometimes insightful work my feeling lingered at half its initial strength. Flescher deals ably with important issues, but his conclusions in favor of dual therapy seem unwarranted.

There can be no doubt of Flescher's commitment to and mastery of psychoanalytic thought, and the reader unschooled in this language will have special difficulty. In this book his focus is less on internal libidinal economics than on the social matrix in which they are shaped. This social orientation is expressed in the title phrase "genetic psychoanalysis" by which he means, first, the thoroughgoing recognition that present personality dynamics are crucial reflections of experiences with two parents, and, second, that the "analytic situation duplicates the personality-shaping parent-child relationship."

Flescher proposes the integration of these two assumptions by dual therapy, that is, regularly alternating therapy sessions with two therapists of opposite sex. In traditional psychoanalytic therapies the vehicle for working out per-

sonality determinants from *both* parents is the maternal and paternal transferences. Depending upon the therapist's actual gender one of these transferences will be discordant with reality. Flescher cautions against a still greater liability, however. It is the continued temptation, if not acting out, of the regressive dyadic relationship which is as limiting of growth in therapy as in early development.

With relentless scrutiny he unearths the fixating features of such dyads. It is, in fact, the unsuccessful resolution of the anaclytic and Oedipal dyads into full triadic maturity which accounts for patients' difficulties. Because of its insurance against the countertransference attitudes of therapists that mirror the "various stultifying investments of parents in children" Flescher sees indications for dual psychotherapy in almost every condition and situation save smoothly functioning psychoanalysis. Unfortunately the reader is left to imagine what reservations about dual therapy are implied by this exception.

IF dual therapy is to counteract the damaging cross-generational, intrafamilial dyads, then the relationship between the two therapists must be aligned in a generative direction which permits the patient's growth. Flescher does not explore this point to a degree commensurate with its importance. He does propose a method of synoptic recording which permits a therapist and patient to tape record a brief annotated summary of an hour as a means of informing the associate therapist of what transpired. There are considerable benefits in this method for the patient in terms of cementing the triadic nature of treatment, making the mature portion of the patient's ego a partner in treatment, and aiding in the integration of the previous material. Therapists too can use synoptic recording with or without dual therapy to aid in integrating across sessions in accord with an over-all cognitive map of treatment, and as an opportunity to communicate to patients in a less threatening way than in the session proper. However, Flescher seems to recognize that this method does not get to the heart of the problem in that

each therapist resists "being attuned . . . to the fact that the patient in front of him is not his patient alone but also a patient of the other member of the dual team." One suspects that the thorough handling of the therapists' relationship would reduce the efficiency of the method.

The point may be that the primary motivations and gratifications for therapists lie in the creation, maintenance, and dissolution of dyadic relationships, and the best strategy is not to dispense with these motives but to rob them of their destructive potential through the tried methods of consultation and self-scrutiny. The major contribution of Flescher's book is not in demonstrating a new treatment method but rather in its determined unmasking of the pitfalls of transference and countertransference in one-to-one therapies.

Divided We Stand

Leonard D. Eron (Ed.)

The Classification of Behavior Disorders. Chicago: Aldine, 1966. Pp. xii + 180. \$5.95.

Reviewed by JOHN G. WATKINS

The editor, Leonard Eron, received his PhD from the University of Wisconsin and has taught at Yale and Smith College. He is now Professor of Psychology at the State University of Iowa. He has published in the areas of role and learning theories, TAT, and medical education.

The reviewer, John G. Watkins is Professor of Psychology and Director of Clinical Training, University of Montana. His PhD is from Columbia and he is author of Hypnotherapy of War Neuroses and General Psychotherapy.

THIS WORK represents a symposium of lectures delivered at the University of Iowa by "a practicing psycho-

analyst, an experimental psychopathologist, a child psychiatrist in the psychological tradition, and a psychiatrist who, although trained and practicing as a psychoanalyst, can be best termed an iconoclast." Each of the four contributors came to the campus for a three-day period during which he delivered his lecture on problems of classification. Afterwards each was randomly assigned one of the other's talks to criticize. Accordingly, the four speakers in this symposium were not face to face and did not interact directly with each other.

Although the goal of a multi-disciplinary examination of a common problem was not reached, there are values to be derived by the reader from the individual contributions, considered as separate papers in themselves.

Dr. Lewis L. Robbins, a practicing psychoanalyst, presents a scholarly historical review of classification through Kraepelin. This includes references to a number of older and less well known writers. Robbins believes that "there may be a continuum from health to illness." He holds that "diagnoses currently in use are more a nomenclature than a system of classification" and doubts that "we will ever be able to develop a natural system of classification based upon a qualitatively unique etiology." He states that "ultimately it will not be the names we give to the conditions—but the understanding of the reasons" that will count.

In a complete change of pace and manner, Dr. Joseph Zubin, a research psychologist, apparently assumes that classification is both possible and desirable. He criticizes the current psychiatric nosology and describes a number of attempts to validate instruments of evaluation. These center around several studies by Zubin and co-workers aimed at statistically validating the Ward Behavior Inventory and locating culture-free indicators to pathology. Included are such variables as reaction time, pupillography, and potentials to ulnar stimulation.

DR. LEON EISENBERG, a child psychiatrist, indicates quite clearly his view that "there is a qualitative difference between the healthy and the sick." He

strongly supports a medical model of classification. From this viewpoint he presents his own classification system of childhood psychoses using some of the terms in the American Psychiatric Association nosology. He concludes that "differential diagnosis is no academic exercise—it is the very stuff of medicine" and leaves the reader in no doubt that he considers the entire field the province of medicine.

In the concluding paper entitled "The Psychiatric Classification of Behavior: A Strategy of Personal Constraint," Dr. Thomas Szasz attacks the traditionalism of psychiatric diagnosis. His biting criticism seems directed equally at some experimental psychologists as well as physicians as he criticizes "behavioral scientists" who "classify people as if they were things." He questions "the unquestionable: the unification of psychiatry and medicine." He concludes that "however difficult it may be to classify things, it is even more difficult *not* to classify things: to suspend judgment and delay the act of classification." Szasz claims that a psychiatrist does not really diagnose an illness: he assigns a "social role" to which the individual is constrained for the purpose of controlling his behavior.

The individual papers are each interesting in presenting a viewpoint, but the symposium does not yield a new or integrated approach to the problems of classification.

Progressive Education Revisited

Henry Clay Lindgren

Educational Psychology in The Classroom. New York: Wiley, 1967. Pp. 686. \$8.50.

Reviewed by JOHN F. FELDHOUSEN

The author, Henry Clay Lindgren, is Professor of Psychology at San Francisco State College. He is the author of several books in the fields of education

and psychology, including *Psychology: An Introduction to a Behavioral Science*, written with Donn Byrne and Lewis Petrinovich.

The reviewer, John F. Feldhusen, is Professor of Education and Psychology at Purdue University. His PhD is from the University of Wisconsin and he has taught at Wisconsin State College.

IN ADDITION to achieving specific goals to which it addresses itself, an educational psychology textbook ought to demonstrate the range and type of problems with which educational psychologists are concerned, their methods of inquiry, the current state of their knowledge, and potential applications of this knowledge to teaching problems. The textbook writer, acting as a representative of the discipline, must also be *au courant*.

In the preface to this text the author identifies three problem areas that are of great importance today and to which he will devote major attention: cognitive development, instructional technology, and the education of disadvantaged youth. In addition, he emphasizes mental hygiene, social aspects of learning, traditional versus modern methods and learning theories.

Problems in these areas are undoubtedly of considerable interest to educational psychologists today, but it is doubtful that they represent adequately the new problems that should be included. Meaningful verbal learning, the nature and role of objectives, attitude learning, and classroom interaction analysis are some of the topics that should be but are not dealt with or are treated inadequately.

Learning theory and teaching methods could be dropped, and mental hygiene and social aspects should be deemphasized. In summary, it seems likely that this text does not represent well the problems that are currently of major concern in educational psychology.

The second requirement for an educational psychology text is to demonstrate the methods of inquiry, research, or analysis used by educational psychologists. The author of this text asserts in the preface that he will stress the role of the teacher as behavioral scientist.

But alas, the Lindgren text often demonstrates the methods of inquiry of several decades ago when surveys and matched-group comparisons were widely used. Much of the research illustrated is old and inadequate. While most sections or topics are supported by at least one post 1960 reference, a large number of references date from 1920 to 1950. In describing this older research, outmoded research methodology is being taught.

The text also fails to present current research methods and the directions of development of educational research. There can be no doubt that educational psychologists have been developing new and greatly improved research methods. Furthermore, the new approaches to research via regional laboratories, research and development centers, and other provisions of the Elementary and Secondary Education Act, will inevitably bring teachers into a more central role in educational research. But the Lindgren text has little to say about the new educational research in which educational psychology is playing a central and guiding role.

THE third requirement of the educational psychology text is to represent the current state of knowledge in the discipline. To do this it must be comprehensive in its coverage of available knowledge, accurate in defining or explaining, and well organized. The Lindgren text falls short in all three respects.

The text fails completely to deal with some important topics (e.g., computer-assisted instruction, discovery learning), deals incorrectly or inadequately with others (e.g., concept learning is equated with curricular integration, p. 290), and is sometimes poorly organized (e.g., chapter 9 which is headed "Cognitive and Affective Factors of Learning" covers skill learning, whole versus part learning, and "inelasticity").

The professed attempts to deal with cognitive development and instructional technology are quite unsuccessful. One-half page is devoted to Piaget's ages and stages (p. 67) and ITV is described as a "... new and ... untried dimension ..." (p. 384). However, the chapter on disadvantaged youth presents

good, up-to-date information in a well organized manner.

Finally, the educational psychology text should show potential applications of knowledge to teaching problems. The Lindgren text acknowledges this responsibility (p. 371), it attempts to keep the teacher in the central role (preface, p. viii), and a substantial effort is made throughout the text to relate the content to the business of teaching. The author demonstrates unusual respect for and empathy with the problems of education as viewed by teachers and children. In this respect he is consistent with the phenomenological orientation that he professes.

In spite of the shortcomings and weaknesses that have been noted, this text is really quite readable and interesting. It is quite thorough in its treatment of mental health, and perceptual and social aspects of teaching and learning. Teachers will also welcome the extended discussion of behavior problems and discipline.

Perhaps a major source of difficulty in this text is that the theoretical orientation which should provide meaning and organization is not adequately developed. The author's theoretical orientation is, at best, an eclectic blend of Deweyism, phenomenological psychology, and progressive education. Articulation of the several positions with the content of the text would have helped a great deal.

As long as a branch of science offers an abundance of problems, so long it is alive; a lack of problems foreshadows extinction or the cessation of independent development.

—D. HILBERT

A Hard Look at the Clinic

Camille Lambert, Jr. and Howard E. Freeman, in collaboration with James M. Dunning, Helen M. Hughes, Edward C. Maloof, Robert Morris and Leon J. Taubenhaus.

The Clinic Habit. New Haven, Conn.: College & University Press, 1967. Pp. 191. \$4.50 cloth, \$1.95 paper.

Reviewed by LEIF TERDAL

The first author, Camille Lambert, Jr. is Director of Research of the Health and Welfare Association of Allegheny County, Pa. He went to the Florence Heller Graduate School of Brandeis University as a doctoral student after serving as Director of Alcoholism for the State of New Hampshire and remained at Brandeis as Assistant Professor of Social Research for several years after receiving his PhD. Howard E. Freeman, the second author, is Professor of Social Research and Director of the Research Center, Florence Heller Graduate School, Brandeis. His PhD in sociology is from New York University. He is co-author of The Mental Patient Comes Home.

Leif Terdal, the reviewer, is Assistant Professor, Crippled Children's Division, and Assistant Professor of Medical Psychology at the University of Oregon Medical School where he researches on learning and mental retardation. His PhD is from Michigan State.

THE BOOK, *The Clinic Habit*, asks a concise, yet intriguing, question: does the use of a public dental clinic in childhood result in better dental health in adolescence? Implications are obviously important to behavioral scientists, public health officials, and political leaders at a time when the nation's policy-makers are looking at grave health problems of the poor and the aged and are deciding on health programs. Will even the best of traditional

approaches fail? Should unfamiliar approaches be tried?

Brookline, Massachusetts, sets the context of the study. Of 624 selected families (median family income \$7,150), 173 were eligible for the Brookline Dental Clinic, and, of these, 124 families had sought dental care in one or more clinics. The remainder represented the non-clinic group. The clinic and non-clinic groups were not matched and differed widely according to selected indices: Warner's Index of Status Characteristics, husband's occupational class, mother's education, class self-identification, and family income. The authors point out that their study is retrospective and non-experimental. To their credit, they do identify and relate a complex range of medical, dental, socioeconomic, and attitudinal factors to dental conditions of teen-agers.

The authors painstakingly spell out criteria for dental condition, the critical dependent variable, and a meaningful follow-up procedure to relate dental condition to health practices of the mother, dental conditions of younger siblings, use of private dentists versus clinic dentists, medical health practice of the family, purchasing and savings pattern of the family, educational level, etc. The book synthesizes a lot of data and should be of general interest to those involved in evaluating health and education programs, in that it demonstrates that clinical data can answer critical questions regarding program objectives.

The authors hypothesized "No" and their data bore it out; the use of the public dental clinic in childhood did not result in better dental health in adolescence. Better dental health than what, a skeptical reader might ask. Their answer again is unequivocal. The use of public-supported clinics did not shape, modify, influence, or improve dental health habits. When eligibility ran out, the clinic-treated children neglected their teeth.

IN the opinion of this reviewer, the authors' data are significant and clear in their meaning. Specifically, public-supported health services cannot function while ignoring economic, social,

and educational variables influencing the family, because health related behaviors are determined by such variables. To state it another way, individuals who do not have the minimal behaviors necessary to compete successfully, educationally, and economically in our society, also do not have adequate health-related behaviors in their repertoire. Simply providing free service does not shape those behaviors that are determined by complex cultural variables.

How can we best put this critical finding of the authors in a broader context that will permit us to travel one step further in the direction toward which the authors are pointing? Following their direction, we can ask whether any of the following questions might be correlates of the failure of these families to continue dental health-care on their own. What crisis is the family facing—potential delinquency, school drop-outs, job failure, marriage failure, financial failure—that may make even potentially serious health problems the least of the family's worries? To what extent does a parent who believes that a dentist or a physician exists to treat emergencies express anxiety when contacting a dentist, bringing a child to the dentist, and even sitting in the waiting room with the child? Are these anxieties handled by avoiding or postponing contacts with dentists? To what extent is a visit to the dentist used as a threat in disciplining children? Are some children taught that if they can endure pain they are the better for it? To what extent does a family teach a child that health problems are unavoidable and must be endured?

Students in the behavioral, economic and political sciences will find much to guide their current planning in this little book.



German Books in Psychology: 1967–68

Compiled and briefly described by

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Adolescence

BORNEMANN, E. and BÖTTCHER, H. *Jugendprobleme unserer Zeit*. Göttingen: Verlag C. J. Hogrefe, 1968. In press. (Psychological theory and practical advice for rearing adolescents in an industrial society.)

BRÜGGEMANN, O. *Sexuelle Konflikte in Gymnasien*. Heidelberg: Quelle & Meyer, 1967. Pp. 127, DM 12.—. (Sexual conflicts in highschools. An empirical study of roles, problems, and solutions.)

HASELOFF, O. W. *Jugend und Beruf*. Berlin: Walter de Gruyter, 1968. In press. (The psychology and sociology of adolescents in relation to vocational choices.)

Applied

ARNOLD, W. *Begabung und Bildungswilligkeit*. München: Ernst Reinhardt Verlag, 1968. Pp. 300, DM 26.—. (Talent and motivation, their dynamics and their relation to vocational training.)

BENESCH, H. *Experimentelle Psychologie des Fernsehens*. München: Ernst Reinhardt Verlag, 1968. Pp. 300, DM 26.—. (Experimental psychology and television. Studio organization, production, and viewers ratings.)

GRAMBERG-DANIELSEN, B. *Sehen und Verkehr*. Berlin: Springer Verlag, 1967. Pp. 257, DM 28.—. (Vision and traffic.)

MAYER, A. and HERWIG, B. (Eds.) *Handbuch der Psychologie*. Vol. 9, *Betriebspsychologie*. 2nd Ed. Göttingen: Verlag C. J. Hogrefe, 1968. In press. (Handbook of industrial psychology with contributions from 31 authors.)

SCHARMANN, TH. and ROTH, E. *Lebensplanung und Lebensgestaltung junger Metallarbeiter aus der Bundesrepublik und der Schweiz*. Bern: Verlag Hans

Huber, 1967. Pp. 232, Fr. 32.—. (Life plan and life formulations of young metal workers in Germany and Switzerland.)

Bibliographic

Erziehungswissenschaftliche Dokumentation-Gesamtverzeichnis 1950–1965. Weinheim-Berlin: Julius Beltz, 1967. (Complete registry of the pedagogical literature from 1950–1965.)

FELDKELLER, P. *Wörterbuch der Psychopolitik*. Bern: Franke Verlag, 1967. Pp. 152, Fr. 3.80. (A dictionary explaining the psychological aspects of terms used in politics, propaganda, and leadership.)

SURY, K. *Wörterbuch der Psychologie und ihrer Grenzgebiete*. 3rd Ed. Basel: Schwabe & Co., 1967. Pp. 124, Fr. 28.50. (A dictionary of psychology and related areas.)

WELLEK, A. (Ed.) *Gesamtverzeichnis der deutschsprachigen Literatur der Jahre 1961–1966*. Göttingen: Verlag C. J. Hogrefe, 1968. In press. (A supplement to the abstracts of the German psychological literature with approx 8000 entries.)

Developmental

BIERMANN, G. (Ed.) *Handbuch der Kinderpsychotherapie*. München: Ernst Reinhardt Verlag, Vol. I, 1967; Vol. II, 1968. Pp. 1100, DM 96.—. (A handbook of child-psychotherapy containing contributions from 100 national and international authors.)

BITTNER, G. and SCHMID-CORDS, EDDA (Eds.) *Erziehung in früher Kindheit*. (Vol. VI, *Erziehung in Wissenschaft und Praxis*.) München: Piper, 1968. Pp. 432, DM 18.50. (National and international

studies and reports on early development, play, phantasy, fears, styles of childrearing and on the mothers' mental hygiene.)

WUHLER, K. and SCHENK-DANZIGER, LOTTE. *Abriß der geistigen Entwicklung des Kleinkindes*. 9th Ed., Heidelberg: Quelle & Meyer, 1968. Pp. 219, DM 13.80. (Bühler's work on the mental development of the child augmented with recent research.)

PECHÈNE, H. CH. *Geschwisterkonstellation und psychische Fehlentwicklung*. München: Johann Ambrosius Barth, 1967. Pp. 244, DM 35.—. (Sibling constellation and psychic "mis-development.")

KASZTANTOWICZ, U. *Erziehen und heilen*. Donauwörth: Verlag Ludwig Auer, 1967. Pp. 172, DM 12.—. (Rearing and healing of problem children in families, schools and institutions.)

KEILHACKER, MARGARETE, RUTENFRANZ, J., TRÖGER, W., and VOGG, G. *Filmische Darstellungsformen im Erleben des Kindes*. München: Ernst Reinhardt Verlag, 1967. Pp. 136, DM 12.50. (Viewing of films and the nature and effect of its psycho-somatic influences.)

LENNHOFF, F. G. *Problem—Kinder*. München: Ernst Reinhardt Verlag, 1967. Pp. 80, DM 16.50. (Report from the work in a therapy home for emotionally disturbed children and adolescents.)

MÜHLE, G. *Entwicklungspsychologie des zeichnerischen Gestaltens*. 2nd Ed., München: Johann Ambrosius Barth, 1967. Pp. 180, DM 28.—. (The developmental psychology of creative drawing.)

SENGLING, D. *Das Problem der Überforderung im Kindes- und Jugendalter*. Weinheim-Berlin: Julius Beltz, 1967. Pp. 247, DM 24.—. (The problems of overwork and demands beyond capacity, its causes and prevention.)

Educational

BURGER, R. *Kräfte im Feld des Bildungsgeschehens*. München: Ehrenwirth Verlag, 1967. Pp. 328, DM 24.80. (Psychology, anthropology, and sociology for teachers in continuation schools.)

CORRELL, W. *Lernpsychologie: Grundfragen und pädagogische Konsequenzen*. Donauwörth: Verlag Ludwig Auer, 1967. Pp. 192, DM 9.60. (Relating classical theories of learning to practical pedagogy.)

ENGELMAYER, O. *Das Kindes- und Jugendalter*, 2nd Ed., München: Ehrenwirth Verlag, 1967. Pp. 332, DM 19.80. (Developmental psychology for teachers and educators.)

FLITNER, A. and SCHEUERL, H. (Eds.)

Einführung in pädagogisches Sehen und Denken. München: Piper, 1967. (Contributions from Montessori, Zulliger, Lewin, Piaget and 17 others.)

KATZENBERGER, L. F. *Auffassung und Gedächtnis*. München: Ernst Reinhardt Verlag, 1967. Pp. 96, DM 6.—. (Psychological and pedagogical aspects of understanding and memory.)

KROH, O. *Entwicklungspsychologie des Grundschulkindes*. 14th Ed., Weinheim-Berlin: Julius Beltz, 1967. Part I & II, Pp. 100+130, DM 10.—. (The grammar-school child and his developmental phases of perception, imagery, intellectual integration, feelings, values, etc.)

MIERKE, K. *Psychohygiene im Schulalltag*. Stuttgart: Ernst Klett Verlag, 1967. Pp. 301, DM 28.—. (Mental hygiene in schools. Preventive and therapeutic measures through developmental psychology, psychoanalysis and milieu therapy.)

NICKEL, H. *Die visuelle Wahrnehmung im Kindergarten- und Einschulungsalter*. Stuttgart: Ernst Klett Verlag, 1967. Pp. 107, DM 20.—. (Visual perception and pre-school children. An empirical investigation of individual differences and its effect on instructions.)

RÖSLER, H.-D. *Leistungshemmende Faktoren in der Umwelt des Kindes*. 2nd Ed., Leipzig: Johann Ambrosius Barth, 1967. Pp. 200, DM 13.80. (An empirical study of environmental factors contributing to pedagogical failure.)

SACHS, S. *Aus Nomadenkindern werden Schüler*. Bern: Hans Huber, 1967. Pp. 140, DM 12.—. (Childrearing and pedagogical problems of Mid-Eastern immigrants into Israel.)

STRUNZ, K. *Der neue Mathematikunterricht in pädagogisch-psychologischer Sicht*. 5th Ed., Heidelberg: Quelle & Meyer, 1968. Pp. 360, DM 30.—. (Perception, thinking, memory, and phantasy in relation to mathematical thinking.)

General

ERISMANN, TH. H. *Zwischen Technik und Psychologie*. Berlin: Springer Verlag, 1968. Pp. 220, DM 19.80. (Between technic and psychology. Basic problems of cybernetics.)

POKORNY, R. *Psychologie der Handschrift*. München: Ernst Reinhardt Verlag, 1967. Pp. 280, DM 28.—. (Graphology: psychological and characterological aspects.)

PONCRATZ, L. J. *Problemggeschichte der Psychologie*. Bern: Franke Verlag, 1967. Pp. 372, Fr. 39.—. (A historical approach to classical problems of psyche, consciousness, experience, behavior and learning.)

UNDEUTSCH, U. (Ed.) *Handbuch der Psychologie*, Vol. 11, *Forensische Psychologie*. Göttingen: Verlag C. J. Hogrefe, 1967. Pp. 900, DM 96.—. (Handbook of forensic psychology. The witness, the accused, the expert, evaluations, etc. 16 contributors.)

Intelligence

BELSER, H. *Testentwicklung*. Berlin-Weinheim: Julius Beltz, 1967. Pp. 260, DM 14.—. (The development of group intelligence tests. A critical analysis and practical examples.)

EWERT, O. M. *Phantasie und Intelligenz bei Jugendlichen*. Berlin-Weinheim: Julius Beltz, 1967. Pp. 32, DM 14.—. (The development of fantasy and its correlation to adolescent intelligence.)

JÄGER, A. O. *Dimensionen der Intelligenz*. Göttingen: Verlag C. J. Hogrefe, 1967. Pp. 400, DM 48.—. (A factoranalytic study of intelligence. 234 variables yielded six main categories including "inventiveness" and "productivity.")

ZELLER, W., ZELLER, LORE and THOMAS, K. *Begabung und Charakter: Der älteste und der jüngste Sohn*. Göttingen: Verlag C. J. Hogrefe, 1968. In press. (The lives of several hundred artists, composers, and writers are examined to investigate the relation between character and specific talents.)

Learning

BREMER, W., HOBSENSIEFEN, G. and LAUBE, H. *Programmierte Instruktion in der Berufsausbildung*. Berlin-Weinheim: Julius Beltz, 1967. Pp. 198, DM 11.50. (Programmed learning in the USA. A critical discussion of production, application, and training.)

HASELOFF, O. W. and JORSWIECK, E. *Psychologie des Lernens*. Berlin: Walter de Gruyter, 1968. In press.

KATZENBERGER, L. F. *Gedächtnis oder Gedächtnisse?* München: Ehrenwirth Verlag, 1967. Pp. 116, DM 14.80. (A factor analysis of memory and its independent factors.)

OERTER, R. *Moderne Entwicklungspsychologie*. Donauwörth: Verlag Ludwig Auer, 1968. Pp. 396, DM 19.80. (The developmental and social learning of motives, will, attitudes, and cognitive accomplishments.)

PARREREN, VAN. *Lernprozess und Lernerfolg*. Berlin: Georg Westermann, 1968. Pp. 388, DM 38.—. (The psychology of learning and its experimental foundations. Translated from the Dutch.)

WOLL, ERNA. *Programmierte Unterweisung*

in der Musikerziehung. München: Ehrenwirth Verlag, 1967. Pp. 160, DM 16.80. (Programmed instructions in musical scales, cadence, rhythm, note-reading, and singing.)

Motivation

SCHIEFELE, H. *Motivation im Unterricht*. 2nd Ed., München: Ehrenwirth Verlag, 1967. Pp. 216, DM 19.80. (Types of motivation in human learning and their application in schools.)

TOMAN, W. *Motivation und Persönlichkeit*. Göttingen: Verlag C. J. Hogrefe, 1968. In press. (Theoretical, experimental, clinical, and social viewpoints of motivation.)

Personality

BUTTKUS, R. *Physiognomik*. 2nd Ed., München: Ernst Reinhardt Verlag, 1968. Pp. 204, DM 18.—. (Description of a new method to assess personality.)

LANGE-EICHBAUM, W. and KURTH, W. *Genie, Irrsinn und Ruhm*. 6th Ed., München: Ernst Reinhardt Verlag, 1967. Pp. 764, DM 58.—. (The myth of the genius and his "pathographie.")

LEONARD, K. *Der menschliche Ausdruck*. Leipzig: Johann Ambrosius Barth, 1968. Pp. 300, MDN 40.—. (Psychological assessments through observations of mimicry, gesticulations, and intonations.)

REMPLEIN, H. *Psychologie der Persönlichkeit*. 6th Ed., München: Ernst Reinhardt Verlag, 1967. Pp. 687, DM 22.—. (A study of the individual characteristics of men.)

Physiological and Comparative

BOVÉ, F. J. *The story of ergot*. Basel: Schwabe & Co., 1968. Pp. 290, SFr. 28.—.

EBEL-EIBESFELDT, I. *Grundriss der vergleichenden Verhaltensforschung. Ethologie*. München: Piper, 1967. Pp. 528, DM 65.—. (Foundation of comparative behavior. With 276 figures.)

FISCHEL, W. *Vom Leben zum Erleben*. München: Johann Ambrosius Barth, 1967. Pp. 252, DM 34.—. (Physiological investigations of behavior forms, accomplishments, and goals in animals and humans.)

KAVAC, W. *Der Hirnstamm der Maus*. Berlin: Springer-Verlag, 1967. Pp. 180, DM 95.20. (The brain-stem of the mouse with 150 figures.)

RENSCH, B. *Handgebrauch und Verständigung bei Affen*. Bern: Verlag Hans Huber, 1967. Pp. 184, DM 25.—. (The use of hands and communication in monkeys

and the cultural development of humans.)

ROHRACHER, H. *Die Arbeitsweise des Gehirns und die psychischen Vorgänge*. 4th Ed., München: Johann Ambrosius Barth, 1967. Pp. 208, DM 29.—. (Brain functions and psychological processes.)

VOGT, H. H. *Tierpsychologie für jedermann*. 3rd Ed., München: Ernst Reinhardt Verlag, 1967. Pp. 53, DM 3.50. (A popular introduction to comparative psychology.)

Psychotherapy

BIERKENS, P. B. *Denkprozess und Urteil in der Psychodiagnostik*. München: Johann Ambrosius Barth, 1968. Pp. 200, DM 35.—. (Thought processes and judgments in psychodiagnosis.)

BOHM, E. *Psychodiagnostisches Vademecum*. Bern: Verlag Hans Huber, 1967. Pp. 179, DM 25.—. (A handbook for Rorschach diagnosis with charts and tables.)

FRANKL, V. E. *Theorie und Therapie der Neurosen*. 2nd Ed., München: Ernst Reinhardt Verlag, 1968. Pp. 208, DM 24.—. (An introduction to "Logotherapie" and existential analysis.)

MÜLLER, C. *Alterspsychiatrie*. Stuttgart: Georg Thime Verlag, 1967. Pp. 261, DM 45.—. (Gerontology. Its psychopathological, sociological, and psychological aspects. Therapy and welfare measures.)

PRINZHORN, D. *Bildnerlei der Geisteskranken*. 2nd Ed. Berlin: Springer Verlag, 1968. Pp. 361, DM 68.—. (The creative paintings of mental patients. Figures of 187 paintings.)

SPITZ, R. A. (Festschrift) *Einfühlen-Erinnern-Verstehen*. Stuttgart: Ernst Klett Verlag, 1967. Pp. 339, DM 20.—. (A Festschrift for René Spitz' 80th birthday with contributions from psychoanalysts, pediatricians, and comparative psychologists.)

SZONDI, L. *Freiheit und Zwang im Schicksal des Einzelnen*, Bern: Verlag Hans Huber, 1967. Pp. 96, DM 15.—. (Ways to solve conflicts between freedom and duty, between ego and heritage.)

WEISE, K. *Zur Frage des psychischen Aspekts in der Medizin*. Leipzig: Johann Ambrosius Barth, 1967. Pp. 30, MDN 1.80. (Bases of Marxist psychology and the social factors in psychology and psychopathology.)

Social

BATTEGAY, R. *Der Mensch in der Gruppe*. Bern: Verlag Hans Huber, 1967. Vol. I. *Sozialpsychologische und dynamische*

Aspekte. DM 10.80. Vol. II. *Allgemeine und spezielle gruppenpsychotherapeutische Aspekte*. Pp. 236, DM 29.—.

BRANDT, G. A. *Probleme und Erfolge der Erziehungsberatung*. Berlin-Weinheim: Julius Beltz, 1967. Pp. 123, DM 1.—. (Success in child guidance in relation to client groups, symptoms, and treatment methods.)

FRANKE, J. *Ausdruck und Konvention*. Göttingen: Verlag C. J. Hogrefe, 1967. Pp. 180, DM 28.—. (The formation of human expressions through socio-cultural influences.)

GRAUMANN, C. F. (Ed.) *Handbuch der Psychologie*, Vol. 7. *Sozialpsychologie*. Göttingen: Verlag C. J. Hogrefe, 1968. In press. (Handbook of social psychology with contributions from 34 authors.)

RÖSSNER, L. *Das Autosozioogramm*. München: Ernst Reinhardt Verlag, 1968. Pp. 44, DM 4.50. (Dynamic representations of group processes, their structure, and their therapeutic possibilities.)

ROTH, E. *Einstellung als Determination individuellen Verhaltens*. Göttingen: Verlag C. J. Hogrefe, 1967. Pp. 176, DM 28.—. ("Einstellung" as a behavioral factor is related to set, opinion, stereotypy, instincts, and traits.)

Test & Measurement

DRENTH, P. J. D. *Der psychologische Test*. München: Johann Ambrosius Barth, 1968. Pp. 200. (Test development and construction.)

INGENKAMP, K., & MARSOLEK, THERESIA. *Möglichkeiten und Grenzen der Testanwendung in der Schule*. Berlin-Weinheim: Julius Beltz, 1967. (First International workshop on "Educational Measurement." Berlin, 1967. Participants from 27 countries representing grammar, high-school, and university levels.)

LIENERT, G. A. *Testaufbau und Testanalyse*. 2nd Ed., Berlin-Weinheim: Julius Beltz, 1967. Pp. 502, DM 35.—. (Theoretical bases and practical applications in the development and standardization of psychological tests.)

SACHS, L. *Statistische Auswertungsmethoden*. Berlin: Springer Verlag, 1968. Pp. 640, DM 58.—. (Basic statistical processes, prepositions and formulas for the non-mathematician. Small sampling and non-parametric methods. 190 tables for simplified calculations.)

SIXTL, F. *Messmethoden in der Psychologie*. Berlin-Weinheim: Julius Beltz, 1967. Pp. 470, DM 54.—. (Matrix algebra and multidimensional scaling. Classical and new approaches.)

Textbooks

- BOHM, E. *Lehrbuch der Rorschach Psychodiagnostik*. 3rd Ed. Bern: Verlag Hans Huber, 1967. Pp. 520, DM 56.—. (Theory and practical application of Rorschach diagnoses. 10 color charts for localization.)
- CORRELL, W. *Einführung in die pädagogische Psychologie*. Donauwörth: Verlag Ludwig Auer, 1968. Pp. 364, DM 15.80. (Learning, programmed learning, individual differences, and motivation related to teaching and curriculum design.)
- HASELOFF, O. W. *Kleines Lehrbuch der Statistik*. 3rd Ed. Berlin: Walter de Gruyter, 1967. Pp. 253, DM 36.—. (Statistics for scientists, social scientists, and educators.)
- . *Psychologie*. Berlin: Walter de Gruyter, 1968. In press. (Foundations and advances in psychology.)
- HECKHAUSEN, H. *Allgemeine Psychologie in Experimenten*. Göttingen: Verlag C. J. Hogrefe, 1968. In press. (A manual for the experimental laboratory describing theories, methods, and apparatus for individual and group studies.)
- LERSCH, PH. *Der Mensch als soziales Wesen*. 2nd Ed. München: Johann Ambrosius Barth, 1967. Pp. 256, DM 28.—. (Introduction to social psychology.)
- MILL, R. and ROHRACHER, H. *Lehrbuch der experimentellen Psychologie*. 2nd Ed., Bern: Verlag Hans Huber, 1967. Pp. 500, DM 48.—.
- PAWLIK, K. *Dimensionen des Verhaltens*. Bern: Verlag Hans Huber, 1967. Pp. 520, DM 38.—. (Introduction to methods and results of factor-analytic research in psychology.)

Tests for Teachers

J. Stanley Ahmann and Marvin D. Glock

Evaluating Pupil Growth: Principles of Tests and Measurement. 3rd Ed. Boston: Allyn & Bacon, 1967. Pp. xi + 605.

Reviewed by ARDEN N. FRANDSEN

J. Stanley Ahmann, the first author, is Professor, Head of the Department of

Psychology, and Academic Vice President of Colorado State University, Fort Collins. He is co-author of two other books in measurement and in statistics, and author of *Testing Student Achievements and Aptitudes*. Marvin D. Glock, the second author, is Professor of Educational Psychology at Cornell University. He is co-author (with Ahmann) of *Evaluating Elementary School Pupils* and author of a *College Reading Manual*.

The reviewer, Arden N. Frandsen, is Professor of Psychology, Utah State University. His PhD is from the University of Minnesota. He teaches courses in educational psychology for prospective elementary and secondary school teachers and in psychometrics for school counselors and psychologists. He is author of *How Children Learn and Educational Psychology*, 2nd Ed., 1967.

THE BOOK, *Evaluating Pupil Growth: Principles of Tests and Measurement*, was written for elementary- and secondary-school teachers, not for the "theorist." The authors chose to present principles "that the teacher can make practical use of in his classroom." In a book of four parts, the first three cover the principles and skills teachers need for constructing and using objective and essay tests and for evaluating student performance and products in the day-to-day appraisal of academic achievement in the classroom. Part IV includes the selection and use of appropriate standardized tests of achievement, intelligence, aptitudes, creative abilities, interests, attitudes, and adjustment for periodic evaluation both of long-range achievement and of potentialities related to it. Although the term *growth* is prominent in the title, the concepts associated with developmental trends and the measurement of gains are not emphasized.

Evaluations of prior achievements can guide both students and teachers in their next steps toward well-defined objectives. In implementing this function of teaching, the book is excellent! It covers thoroughly the planning, writing, editing, and organizing of items. And it explains how teachers can make analyses of student responses to the items that can improve both instruction and revised tests. With examples of

"poor" and "improved" items, the authors explore the merits, pitfalls, and strategies for overcoming problems in constructing and using a large array of devices. Their thoughtful explanations and illustrations should guide teachers toward the same high standards, insights, ingenious strategies, and creative flair that the authors display.

GREATER interest in theory and a more differentiated analysis of what the different tests measure would have improved the part on standardized tests. The authors suggest the praiseworthy goal that measurement should guide teachers in providing the "courses that correspond with the interests and abilities of all students." To attain this goal, each diversely talented student needs to discover and develop his best abilities. But a disposition toward global interpretations rather than analysis of the differentiated patterns of abilities of students diverts the authors from implementing their goal as fully as they might. Although Guilford's analysis of the structure of intellect is described briefly, it is not exploited for definitions of the varied abilities measured by the different tests described. Rather than develop an analytical classification of the different kinds of abilities they measure, ten different intelligence and scholastic aptitude tests are presented as alternate measures of "general mental ability." The *Differential Aptitude Tests* are described, but without definition of the different abilities they measure. Since no specific tests of creativity are described, the authors miss the opportunities to illustrate the distinction Guilford's model makes between convergent and divergent thinking and to elaborate such facets of thinking as fluency, flexibility, and originality. More precise classification of the tests of interests, attitudes, social behavior, and adjustment (which are all lumped together under the category of "personal-social adjustment") would also prompt more discriminating use of these varied tests.

Three instructional aids enhance the effectiveness of the text. "Problems" interspersed in the text engage the student in concrete applications of the principles he is developing. "Selected Lists of

Tests" in the appendices, and which should be available to the student for firsthand examination, greatly extend the scope of tests with which the student becomes acquainted. Annotated "Suggested Readings," taken from the classic and current literature, elaborate many of the concepts presented only briefly in the text. Relatively more changes are made from the second to the third edition of this volume in these aids than in the text itself.

BOOKS RECEIVED

- BARNLUND, DEAN C. *Interpersonal communication: survey and studies*. Boston: Houghton-Mifflin, 1968. Pp. xi + 727.
- BLINKOV, SAMUIL M. and GLEZER, IL'YA I. Translated from the Russian by BASIL HAIGH. With a Foreword to the English Edition by DONALD B. LINDSLEY. *The human brain in figures and tables: a quantitative handbook*. New York: Basic Books and Plenum Press, 1968. Pp. xxxii + 482. \$25.00.
- BRODY, EUGENE B. *Minority group adolescents in the United States*. Baltimore: Williams & Wilkins, 1968. Pp. vii + 243. \$8.25.
- COMMITTEE ON ADOLESCENCE: GROUP FOR THE ADVANCEMENT OF PSYCHIATRY. *Normal adolescence: its dynamics and impact*. New York: Scribner, 1968. Pp. 127. \$3.95 cloth; \$1.45 paper.
- CORNING, WILLIAM C. and BALABAN, MARTIN (Eds.) *The mind: biological approaches to its functions*. New York: Interscience (Wiley), 1968. Pp. ix + 321. \$12.50.
- CROWCROFT, ANDREW. *The psychotic: understanding madness*. Baltimore: Penguin Books, 1967. Pp. 207.
- DOMHOFF, G. WILLIAM. *Who rules America?* Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. 184. \$2.45 paper; \$4.95 cloth.
- EIDELBERG, LUDWIG (Ed.-in-Chief) *Encyclopedia of psychoanalysis*. New York: Free Press, 1968. Pp. xxvii + 571. \$27.50.
- ETZIONI, AMITAI. *The active society: a theory of societal and political processes*. New York: Free Press, 1968. Pp. xxv + 698. \$10.95.
- FRIED, MORTON, HARRIS, MARVIN and MURPHY, ROBERT. *War: the anthropology of armed conflict and aggression*. New York: Natural History Press, 1968. Pp. xxi + 262. \$6.95.
- GAYLIN, WILLARD (Ed.) *The meaning of despair: psychoanalytic contributions to the understanding of depression*. New York: Science House, 1968. Pp. 417. \$9.50.
- GEISSMAN, PIERRE and DE BOUSINGEN, ROBERT DURAND. *Les méthodes de relaxation*. Bruxelles, Belgium: Dessart, 1968. Pp. 318.
- GEIST, HAROLD. With a Foreword by DEL E. WEBB. *The psychological aspects of retirement*. Springfield, Ill.: Thomas, 1968. Pp. xi + 131. \$6.50.
- HENRY, EDWIN R. (Chairman) *Research conference on the use of autobiographical data as psychological predictors*. Held at Greensboro, N. C., June 10-11, 1965. Greensboro, N. C.: Richardson Foundation, 1966. Pp. iii + 235.
- HESS, ROBERT D. and BEAR, ROBERTA MEYER (Eds.) *Early education: current theory, research and action*. Chicago: Aldine, 1968. Pp. x + 272. \$6.95.
- HOLLISTER, LEO E. *Chemical psychoses: LSD and related drugs*. (A Monograph in the Bannerstone Division of American Lectures in Living Chemistry.) Springfield, Ill.: Thomas, 1967. Pp. xi + 190. \$8.00.
- HUEY, EDMUND BURKE. *The psychology and pedagogy of reading: With a Review of the History of Reading and Writing and of Methods, Texts, and Hygiene in Reading*. Cambridge, Mass.: M.I.T. Press, 1968 (1st publ., 1908) Pp. xlix + 469. \$3.95.
- HYMAN, HERBERT H. and SINGER, ELEANOR (Eds.) *Readings in reference group theory and research*. New York: Free Press, 1968. Pp. xi + 509. \$10.95.
- JERSILD, ARTHUR T. *Child psychology*, 6th ed. Englewood Cliffs, N. J.: Prentice-Hall, 1968. Pp. xii + 610. \$8.50.
- KIEV, ARI. *Curanderismo: Mexican-American folk psychiatry*. New York: Free Press, 1968. Pp. xiii + 207. \$6.95.
- KLAUSNER, SAMUEL Z. (Edited, and with a Foreword by) *Why man takes chances: studies in stress-seeking*. New York: Doubleday-Anchor, 1968. Pp. xii + 267. \$1.45.
- LEVINE, DAVID (Ed.) *Nebraska symposium on motivation, 1967*. Lincoln, Neb.: Univ. of Nebraska Press, 1967. Pp. ix + 335. \$3.25 paper; \$6.25 cloth.
- LEVY, SHELDON G. *Inferential statistics in the behavioral sciences*. New York: Holt, Rinehart & Winston, 1968. Pp. xiv + 267. \$7.95.
- LINDGREN, HENRY CLAY (Ed.) *Readings in educational psychology*. New York: Wiley, 1968. Pp. x + 474. \$8.95 cloth; \$5.95 paper.
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I wonder if there is any such thing as a great parent.

—JOHN CIARDI



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Contemporary Psychology

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On Theory and Metatheory

Melvin H. Marx (Ed.)

Theories in Contemporary Psychology. Including Original Papers Contributed by Leading Psychologists. New York: Macmillan, 1963. Pp. xi + 628.

Reviewed by J. R. ROYCE, W. W. ROZEBOOM, H. TENNESSEN, and T. WECKOWICZ

The editor, Melvin H. Marx, is Professor of Psychology at the University of Missouri, where he has been since 1944. He received his PhD from Washington University. He is editor, with Hillix, of *Systems and Theories in Psychology*.

The reviewers are all members of the staff of the Center for Advanced Study in Theoretical Psychology, The University of Alberta. Royce's center interests are in factor theory, general theoretical and philosophic issues in psychology, and interdisciplinary analysis and synthesis. Rozeboom is interested in behavior theory, psychology and the philosophy of cognition, and philosophy and methodology of science. Tennesen, a philosopher, holds an interest in the philosophy of science, empirical semantics, and existentialism while Weckowicz's field is theories of cognition and perception.

MANY PSYCHOLOGISTS have studied the original version (1951) of this collection of essays. The present version has three sections, only one of which (Part III) deals with theory *per se*; parts I and II are metatheory. While much of Part III appears in print for the first time, and only seven of the original forty-seven selections have been retained, the primary objective remains



MELVIN H. MARX

the same: "to encourage a more critical understanding and a sound utilization of the principles of theory construction." In the exposition and analysis that follows, we shall try to throw light on how well Marx fulfills this objective.

In selection 1 Marx claims "to give a general picture of The General Nature of Theory Construction" while avoiding any entanglement in philosophical problems. Philosophical entangle-

ments are "avoided" by tacitly assuming philosophical positions adapted to a discussion level of the early Vienna Circle. It is unclear whether the question is: (1) how to make bigger and better theories, or (2) how to make some sort of theory by inspecting (3) how some existing (fair or lousy) theories were actually made. The analyses are invariably announced as descriptive; but the hortatory tendencies are quite conspicuous throughout (at least) the meta-theoretic selections under review. And further, none of the contributors quite lives up to Marx's motto: "that the optimal growth of psychological theory will occur when all types of theory construction are encouraged. . . ."

By and large the need for theoretical work is emphasized, but one is warned against "sloppy" theorising as well as "hypothetico-deductive systems of the Hullian variety." The reasons offered for abandoning the latter are psychological rather than methodological, *viz*: this "over ambitious task" exerted, it is alleged, "a disheartening influence on the theorists." They resigned, and decided to settle for theories (either "functional" or "inductive") more immediately related to "direct observation" that "is recognized as fundamental to all science." No attempts are made at illuminating what could be meant by "direct observation," or at distinguishing it from "interpretation." Is the cube-hexagon (or the duck-rabbit) observed or interpreted? Do Bales's observers "directly observe" *solidarity, tension release, antagonism, aggression, etc.*? Marx quotes Guthrie's and Boring's position that "there are no raw facts" and observations "do not reveal concepts until the concepts have been invented." It is unclear how this position is to be seen as

compatible with the pleas for theories based on "direct observation," or with Kantor's insistence (#9) on an unbridgeable schism between 'constructs' and 'events.' According to Marx, "the impressive array of highly reliable and useful scientific knowledge has been accumulated by direct observation, the fundamental task of science." But, according to, e.g., Feyerabend, science started and flourished "not as an observational enterprise, but as an unsupported speculation inconsistent with highly confirmed laws." Both claim to extract their conclusions from an objective study of how the scientist actually operates rather than from considerations as to what theories *should* be or even from what perspective they should be estimated.

It is remarkable that nowhere in the introductory chapters or elsewhere are any serious attempts made to decide on the cognitive status of theories. Is a theory to be considered a *statement* (elliptic or not) that may be found to be true or false dependent upon (crucial?) observations? Kantor tends toward this view, and, most often Marx, and Kenneth Spence (#8) as well. Or is a theory, like an instrument, to be judged according to a more or less precise "usefulness" as suggested by Kendler (#11)? Marx appears, at least on one occasion, to lean in the direction of "instrumentalism" when he (pp. 5-6) sees theories as having a *tool* or/and a goal function, whereas *tenability* is clearly considered irrelevant. The mysterious 'goal function,' which otherwise might suggest that theories had some *autotelic* validity, happily turns out to be indistinguishable from 'tool-function.' This is, however, the only symptom of instrumentalism in Marx, whose general metatheoretic weakness is most conspicuously demonstrated in his exotic and muddled glossary-suggestions concluding Selection 1.

S ELECTIONS 3-5 (R. Lachman, H. A. Simon and A. Newell, A. Chapanis) elaborate on the values and limitations of "models." On the positive side, the authors suggest that models do things like describe complex systems, uncover new relationships, provide a framework

for new experiments, or even amuse us. The dangers include overgeneralization, the inclusion of incorrect and sometimes irrelevant variables and constants, and just wasting everybody's time because we've bet on the wrong horse. Lachman indicates that models can be representational, inferential, interpretational, and pictorial. And Simon, who essentially equates models with theories, offers us a threefold taxonomy in terms of verbal, mathematical, and analogical.

Simon is essentially pro model-building, particularly in the use of the computer as a basis for simulating cognitive processes. His grounds are primarily heuristic, but he also argues that "we are dealing with systems of such complexity that we have a greater chance of building a theory by way of the computer program than by a direct attempt at mathematical formulation." Chapanis, although he recognizes the positive aspects of modeling, has serious reservations. He says psychology is "littered with the wrecks of discarded models," and he sees previously exciting looking models "now" (i.e. any contemporary time) appearing "quaint, naive, and amusing."

But Chapanis's reservations regarding modeling can, of course, also apply to any truth claim. That is, while the computer may provide us with a provocative model for brain function, it is clearly not the *ding an sich*. But, when viewed down the corridors of time, isn't this limitation also true of the best available scientific theory, or whatever *Weltanschauung* we are presently touting? In short, do we ever get anything other than a model or an analogy (i.e., a metaphor) of reality? He who thinks we can get more should run, not walk, to the nearest publisher, and let the rest of us in on the way things *really* are.

Unfortunately psychology does not have a pervasive fundamental unit, such as the atom in physics and chemistry, the cell in biology, or the gene in genetics, that can serve as an elemental building block from which greater complexities can be compounded. It was, of course, such building blocks that the behaviorists wanted in the conditioned response and that the Gestaltists wanted with their more global configurational entities. Subsequently proposed units in-

clude operants, factors, roles, and social institutions. In short, psychology has come up with many units, ranging from the highly molecular level of a simple reflex to the broad molar level of cultural values. Brunswik's lens model, elaborated in his "conceptual focus" paper (#14) is, in our judgment, the best available framework for looking at this issue. This approach, when combined with the S-O-R paradigm for theory construction, allows us to compare and contrast the S-O conceptual focus of psychophysics and Gestalt psychology, the S-R micro-analysis of early behaviorism, the S-O or O-R micro-analysis of physiological psychology, the S-O-R characteristics of contemporary molar cognitive theorizing, etc. The importance of Brunswik's analysis is that it brings the issue of explanatory level into such sharp focus that it renders much of the extant literature as so much excess verbal baggage. If this view is accurate, then we must be critical of Marx's selections (i.e., 14-20) on this topic on grounds of redundancy. Marx could have covered this entire issue much more economically by retaining the Littman-Rosen paper (1st edition) on the 7 varieties of the molar-molecular distinction in place of the 4 or 5 papers he included in this revised volume.

What we get in essence is a defense of micro-analysis and reductionism, either to S-R units or/and to the physiological substrate, in the papers by F. H. George (#15), Krech (#16), and Spence (#19), and a defense of a non-reductive molarity in the paper by Gordon Allport (#18).

The lens model makes it clear that several levels of explanation are, in fact, necessary, depending upon the domain of study. That is, when working in an area such as psychophysiology, some kind of micro unit seems to be called for. And, when working in the domain of social psychology a more molar unit is required. We find it difficult to argue against Brunswik's molar probabilistic functionalism as the crucial conceptual focus of psychology on the grounds that this position speaks to the hard core (i.e., a psychological psychology rather than a physiological or a social psychology) of our discipline.

To be comprehensive, a sourcebook/textbook on contemporary theory in psychology must convey something of the ferment and vitality in current quantitative approaches. Broadly, these fall into three main groups: (1) *psychometrics and psychophysics*, (2) *mathematical models*, and (3) *inferential statistics and experimental design*. Estes's article (#6) is probably the best elementary introduction to the nature of math modeling now available in the literature, and in conjunction with Atkinson's article (#33), affords the reader an excellent if restricted entry into area (2). The burden of servicing the rest of quantitative psychology, however, has been dumped entirely upon the narrow shoulders of Burke's paper (#7). While the latter is admirable enough in its own right and heroically manages to involve both areas (1) and (3), the issue addressed—possible restrictions on statistical methods imposed by scaling theory—is far too peripheral in either area to acquaint the reader with their contemporary character.

Selections 29–33, like others in Part 3, survey aspects of substantive theory in psychology. In the space allotted, none can aspire either to breadth or to depth. However, any work that specializes, as does this one, in abstract commentary on the nature and function of theory is certain to leave its reader fogbound in vacuous generalities unless it manages to tie its metatheoretical abstractions to concrete details of genuine theory in action. (The travesties of theory that appear in summary-type secondary sources are an impediment rather than an aid to learning what serious theorizing is really like.) But while Marx's readers will still mostly have to tie their own, three of these five selections lay before the reader a methodologically diversified assortment of tidbits of the real thing, trimmed and packaged for ready access to their metatheoretically salient features. Atkinson (#33) presents a stimulus sampling theory of signal detection that, apart from omission of mathematical derivations, is a technically honest statement of a serious mathematical model, yet makes clear to the uninitiated reader exactly what is being done and why.

The Gough & Jenkins account of theoretical developments in verbal learning and psycholinguistics (#29), though verging upon oversimplification, nonetheless highlights the shape of real concepts and issues therein. And Cotton (#32) provides substance for various abstract approaches to the "definition" of theoretical terms while offering as bonus the essentials of several recent behavior-theoretical controversies. The articles by Taylor and Grings (#30 and 31) on Thinking and Classical Conditioning, respectively, are too much the traditional who's-doing-what sort of overview to give the reader any useful handhold on the functional specifics of theorizing in these areas.

WHAT of the remaining attempts at substantive theory? Very briefly, in selection 24 Zeigler gives a fair overview of the theoretical problems of developmental psychology. However, considering the present primitive state of this domain, the author is overly critical of the theoretical work of Piaget and Werner. Berkowitz's selection (#25) stresses the importance of cognition and phenomenology in contemporary theorizing in social psychology, including a good appraisal of Festinger's theory of cognitive dissonance. Leeper, dealing with personality theory (#26), suggests that the whole field of personality may be redundant, and, if so, will be replaced by a theory of human behavior cast in cognitive terms. In selection 28 L. Horowitz discusses the problems of conceptual clarification and empirical verification of psychoanalytic theory. And the thoughtful selection of Peters on "Affect and Emotion" helps to clarify the issues in the vexatious field of private personal experiences, although it is difficult to agree with the conclusion of the author that all organism-initiated and involuntary behavioral events should be regarded as being emotional.

Both Leibowitz, in his selection on perceptual theory (#34), and Mueller and McGill, in their selection (#35) on sensory psychology, stress the untenability of the traditional dichotomy of the peripheral sensory processes vs. central perceptual processes. Sensory receptors, far from passively absorbing

the flux of impinging energy, actively extract information contained in the impinging energy. And phenomena that traditionally were explained by central perceptual processes can now be explained by relatively simple processes in the sensory organs or pathways.

WHAT can be said by way of an over-all assessment? The most obvious conclusion is that this is still the best textbook-length compilation of readings on theory construction. This does not mean, however, that the book is an unqualified success in attaining the goal the editor set for himself. In fact, this second attempt suffers from the same major defect as the first attempt—namely, a qualitative weakness of technical proficiency at metatheory. The editor's statement in the first selection neither provides sufficient penetrating conceptual clarity nor does it fill the gaps that remain from the mere juxtaposing of related papers. The implication of this criticism should come as no surprise—it is highly probable that the professionally trained philosopher of science is more proficient in the business of rational analysis than is the psychologist. The philosopher's distance from psychological data is his obvious handicap. The present state of affairs points up the need for developing both sets of skills. There is a quantitative weakness as well. We suspect a minimally adequate coverage of the domain staked out would have required two 500 to 1,000 page volumes—one entitled *Metatheory*, and the other entitled *Theory*. But, accepting the present limitations of space, there are, nevertheless, several serious errors of omission and commission. By way of commission, it is difficult to see the centrality of the papers by Kantor (#9), Morrison (#20), Littman (#21), and Burke (#7), or the contemporaneity of the 1939 paper by Stevens (#2). The most obvious examples of omission are the now classic MacCorquodale and Meehl paper on intervening variables and hypothetical constructs, and the Cronbach-Meehl paper on four types of validity. But perhaps the most flagrant omission occurs in the phenomenological-existential-humanistic sector of contemporary psy-

chological thought. Although there are about 5 pages of text on phenomenology, neither the word existentialism nor the word humanistic is even mentioned in the index.

More importantly, over-all we concur with many of Marx's biases (although we usually found it difficult to determine his exact stance), such as the priority he gives to functionalistic theory at the same time that he displays examples of the other three modes of attack (i.e., inductive, deductive, and model). However, his blind touting of the apparently limitless virtues of logical positivism and operationalism shows no awareness that as a philosophy of science positivism is already twice removed from currency, having long been superseded by the liberalized realism of logical empiricism, which in turn has been challenged by a new wave of thinking (Feyerabend, Hanson, Kuhn) that breaks radically with the empiricist tradition. Whatever the merits of these new developments, a text on theory and metatheory that takes no cognizance of them has about the same contemporary relevance as would a manual on dodo maintenance.

Paperback with Power for Pros

Marvin D. Dunnette

Personnel Selection and Placement.

Belmont, Cal.: Wadsworth, London: Tavistock, 1966. Pp. x + 239. \$2.95 text; \$3.95 trade.

Reviewed by ROBERT GUION

The author, Marvin D. Dunnette, received his PhD from the University of Minnesota and has remained there since, now a Professor of Psychology, and a Member of the Industrial Relations Department. He is also Chairman of the Board of Decisions Systems, Inc. He has his ABEPP diploma in industrial psychology, is past-president of Division 14 of APA, winner of the James McKeen Cattell award and author (with Kirchner) of Psychology Applied to Industry.

The reviewer, Robert Guion, is Chairman and Professor of Psychology, Bowling Green State University. His PhD is from Purdue and he is author of Personnel Testing. He recently became consultant to the Office of Federal Contract Compliance on tests and racial discrimination. He is also a winner of the Cattell Award. He is now attempting to apply prediction models to longitudinal prediction of the development of work motivation among recently graduated engineers.

SKEPTICS who believe that a paperback book for undergraduates can't be important should read this one. It may have a profound impact on an entire profession; students initially exposed to personnel selection by Dunnette will not later accept old, trite "standard procedures." The emphasis is on the job behavior to be predicted; unlike more traditional text material, the emphasis is *not* on tests. At the very beginning, general strategy is illustrated with a subtle implication that the only proper meaning of the term "aptitude score" is "probability of success." How sweet it will be when more people who use tests come to understand this simple truth.

The emphasis on work behavior is a theme repeated in later variations, throughout the book. For example, the chapter describing ways of measuring individual differences would have been excellent simply as a catalog of descriptive variables and the methods by which they have been defined and measured. However, the material is presented so as to achieve brilliantly the more specifically stated purpose of the chapter: to identify "cognitive abilities, motor skills, or patterns of typical behavior necessary for getting any particular job done." The subsequent chapter on job analysis is thoroughly behavior-oriented; it stresses job analysis as much for the development of behaviorally-relevant criteria as for inferences about traits likely to be important in making employment decisions. The word "criterion," incidentally, is avoided—much to Dunnette's credit. That word has typically directed attention to tests and their goodness; in contrast, avoiding it allows attention to stay on behavior

and on the evaluation of various options for predicting it.

EVEN more commendable is the handling of technical concepts. The coverage is thorough and genuinely sophisticated, but each is presented and explained with humor and simplicity. It is unlikely that any colleague will approve the treatment of every technical issue. (I applaud Dunnette's implication that the real value of high *r*'s is the identification of "variables that merit more thorough study"; I quarrel with his recommended procedure for measuring overlap.) Nevertheless, all must find his treatment provocative in challenging traditional phoniness and identifying the constraints reality imposes on model-building. Dunnette introduces complex models (moderators, synthetic validity, differential prediction, etc.) in a way understandable both by the undergraduate meeting them for the first time and the old pro too imbedded in the classic psychometric approach to realize its serious defects of over-simplification.

A major reward in this book is Dunnette's move toward individualizing the selection process. After all these years of lip service, here is a text on personnel selection that really wants to recognize individual differences! This major theme is encapsulated in a flowchart showing an "individualized, multistage, sequential" process through which decisions are made; it identifies a full range of needed research. In Dunnette's words, "wise personnel decisions demand evidence about the individuality of people, the special requirements of jobs, and interaction between the two."

Never before have I seen such a delightful combination of technical sophistication, readability, and human sensitivity. May it be widely read!



The certainties of one age are the problems of the next.

—R. H. TAWNEY



International Relations as a Behavioral Science: Three Samplers

Herbert C. Kelman (Ed.)

International Behavior: A Social-Psychological Analysis. New York: Holt, Rinehart & Winston, 1965. Pp. xiv + 626. \$12.95.

J. David Singer (Ed.)

Human Behavior and International Politics: Contributions from the Social-Psychological Sciences. Chicago: Rand-McNally, 1965. Pp. xii + 466.

Gerald Sperrazzo (Ed.)

Psychology and International Relations. Washington, D. C.: Georgetown University Press, 1965. Pp. 102.

Reviewed by CHARLES E. OSGOOD

The editor of the first book, Herbert C. Kelman, is Research Psychologist at the Center for Research on Conflict Resolution and Professor of Psychology at the University of Michigan. His PhD is from Yale. J. David Singer, editor of the second book, is also at the University of Michigan, a Professor in the Department of Political Science and Research Political Scientist at the Mental Health Research Institute. His PhD is from NYU. The third editor, Gerald Sperrazzo, is a consultant to the National Security Agency. His PhD is from the University of Ottawa.

The reviewer, Charles E. Osgood, is Professor of Psychology and Research Professor on Communications, University of Illinois. He served as Director of the Institute of Communications Research there for many years. In 1965 he was appointed Professor in the Center for Advanced Study at Illinois. A Past President of the American Psychological Association, and a 1960 recipient of the Association's Distinguished Con-

tribution to Psychology, he is well known to CP's readers.

REVIEWING books that are "collections" or "readings in" is not a chore that one ordinarily accepts with alacrity. I accepted mainly because of my respect for the editors of these particular collections—and because I wanted the books for my own library! I discovered that these samplers of work going on in the booming new field of international relations present rather interesting contrasts. The papers in the Kelman edited book are written by behavioral scientists for behavioral scientists, and the chapters were prepared specifically for this volume. The Singer edited book is written by behavioral scientists, but is comprised of reprints explicitly edited for political scientists as an audience. The Sperrazzo edited book contains papers written for a symposium, by psychologists (with one exception) for psychologists, particularly those in international relations research.

Each collection should serve its audience rather well.

SPERRAZZO contributes only a very brief preface to his volume. In it he indicates that the symposium at Georgetown University was designed to encourage prominent behavioral scientists to present their views on how psychology can contribute to an understanding of international relations in a nuclear age. Three of the participants adhered to this strategic aim. Richard Brody, a political scientist, devotes himself to an analysis of the "heated public debate" over whether psychology has any role at all to play, given the nature of the "actors" (nation-states and/or role-playing decision-makers), and decided that cautious generalizations from individual to national levels can be made. Jerome Frank and Earl Nash report on a questionnaire study of the commitment to peace work, but the respondents were members of "the peace movement" rather than psychologists *per se*. Three factors were found to characterize most of these people: "a high degree of initiative, a lively concern for human welfare, and independence of thought." Tom Lough—at the time a psychologist in the Arms Control and Disarmament Agency—makes a frank plea for "more psychologists to become involved in studying and solving current social problems," and makes some very wise suggestions about how behavioral scientists can be more successful in communicating their ideas and findings to policymakers.

Three other participants contributed papers of a more substantive nature. Morton Deutsch discusses misperceptions and misinterpretations which exacerbate human conflicts—going beyond what most of us have done to suggest how people can avoid these cognitive traps. In a paper titled "Allowing for Soviet Perceptions and Motives," Urie Bronfenbrenner—unwittingly, I am sure—provides a demonstration of what Deutsch was talking about in the abstract. This is a three-stage, informal comparative field study of Russian and American images of their own and the other's motives. Bronfenbrenner's con-

clusions are rather ominous: "it proved far easier to get an American to change his picture of the Soviet Union than the reverse" and "to base our arms control and disarmament policy primarily on considerations of strategy and rational analysis is to court disaster. . . ." Larry Solomon offers the reader an excellent overview of research that has been done using Harold Guetzkow's Inter-nation Simulation (INS) technique, including a successful simulation of the application of GRIT (graduated and reciprocated initiatives in tension-reduction).

This little volume closes with a little paper by Gardner Murphy on "Political Invention as a Strategy Against War." Although I would be the first to agree that human civilization stands in great need of political inventions and of "a community capable of flexible selection, adaptation, integration of such inventions," I miss any realistic suggestions as to how we obtain these things. In sum, of the three samplers under review, the Sperrazzo book is the least integrated, the most like a simple collection, even though the individual papers make valuable contributions.

SINGER exercises truly extraordinary editorial control over his reprinted materials. This is accomplished not only by selection of articles to fit his conception of the field of international politics, but by orienting introductions to each section and each article, and by both deleting portions of articles and adding italics *ad libitum*. To understand why this is done, it must be realized that this book of readings is deliberately tailored for political scientists. One can be thankful that Singer is one of the most broadly-based, behavioral-science-oriented political scientists in the field of international relations. Nevertheless, this style of editing has some rather bizarre side-effects. A contribution by Raymond Cattell is emasculated by skipping from a major section titled "Seven Theorems on the Dynamics of Syntality" (statements about them deleted) to the "Summary" which provides only their labels—and these, given Cattell's penchant for private language (e.g., "subsidization in the personal lattice"), can only bewilder the novice reader. Editorial italicizing,

necessarily accompanied by the statement that the emphasis is added, kept disrupting this reader's tracking of the text with wonderments as to *why*. The major sections of this book may represent a rational organization of the field but not, judging from space allotment, a functional one: The International System as Environment (40 pp.), The Nation as Primary Actor (260 pp.), Politics as Interaction (100 pp.) and System Transformation (5 pp.)—the last being written by the editor because he "did not discover any papers that met these particular needs."

Singer is quite aware that many of the selections are only remotely relevant to international relations *per se*, and he devotes most of his introduction to the volume (a significant contribution in its own right) to the problem of analogizing from the individual and the small group to nations and their relations. Such selection is probably appropriate for the political science audience he had in mind, but it certainly reduces the value of the book for psychologists interested in this area. Papers on the social control of juvenile delinquency (Maccoby, Johnson and Church), on distortions of perceptual judgment (William Livant; Jacobs and Campbell), on union-management conflicts (Robert Dubin; Paul Diesing), and on the individual as an information processing system (James G. Miller), for example, do not relate in any obvious way to international politics, useful though they undoubtedly are methodologically to the political scientist. Some of the most intriguing selections are (superficially, at least) the most remote—"Steel Axes for Stone-Age Australians" (Lauriston Sharp), "Social Control in the Newsroom" (Warren Breed), and "Taxicab Rate War: Counterpart of International Conflict" (Ralph Cassady, Jr.).

There are many papers in this rich collection (nearly 50 items) that are clearly relevant for the psychologist working in this field, however. To mention only a few: Donald Campbell's insightful application of gestalt-type criteria of perceptual grouping to the identification of social aggregates; Seymour Lieberman's study of the effects of changing roles upon attitudes of role occupants (albeit in an industrial rather

than a political context); E. P. Hollander's notion of "idiosyncrasy credit" in acquiring status within the constraints of group conformity; Guetzkow and Gyr's study of conflict resolutions in real, live groups of mature people with either substantive or affective disagreements. Again, the liberal use of italicizing and, particularly, deleting is unfortunate, since in all such cases the serious scholar must dig up the originals if he wants the whole story. Thus this collection is a sampler in more than the usual sense.

In his final summation (the five pages that constitute Part Four, System Transformation), Singer has some very cogent things to say about the present international system and the difficulties involved in changing it without holocaust. I wish that he had expanded this section in lieu of appropriate reprints. In terms of General System Theory—an important paper with this title by Ludwig von Bertalanffy introduces the book, by the way—the component systems (nations) are more powerful than, and hence dominate over, the more inclusive inter-nation system. As Singer points out, the individuals who act for nations are caught in a situation in which the rewards and punishments meted out by their own societies tend to drive them away from efforts to transform the total system. "To put it bluntly, decision-makers do not know what foreign policy strategies are most likely both to (a) preserve the short-run security of their own nation and (b) move toward a system change which would enhance the security of all the nations." And here, of course, is where behavioral science has potentially the most to offer.

KELMAN agreed to serve as editor of a volume on international behavior sponsored by the Society for the Psychological Study of Social Issues. He is to be congratulated on the extent to which the product meets the criteria originally set: integrated chapters by different authors written especially for the volume; each chapter "telling a story," "developing a thesis," focus on research directly on international behavior rather than general psychological research that happens to be relevant to

war and peace; the book as a whole serving as a text for behavioral science courses in the field. The various chapters differ considerably in approach and style but Kelman's Introduction and Summary (totaling some 80 pages), as well as his introductions to each chapter, serve to integrate what is nonetheless an already well-integrated presentation.

This volume is narrower in scope than the Singer-edited book in one sense—it deals with two major topics, National and International Images as Part I and Processes of Interaction in International Relations as Part II; it is broader in scope in other senses—all of its chapters, in keeping with the text-book orientation, aim for breadth of perspective and are richly documented with the contributions of other scholars. Another important difference is that, without exception, all of the chapters in the Kelman-edited book deal relevantly with international relations, applying social-psychological analyses and insights directly to these relations rather than obliquely as a source of new methodology. This makes the Kelman volume much more valuable for the *psychologist* studying about or working in this field.

Kelman's introduction puts the present book into a perspective of some 40 years of psychologists' concern with the issues of war and peace. The past decade has seen vast changes in the quality and sophistication of research in this area by social scientists, to say nothing of its sheer volume. Kelman establishes a framework that is generally adhered to throughout the book: "There cannot be a psychological theory that is complete and self-contained . . . there can only be a general theory of international relations in which psychological factors play a part. . . ." The focus is on the social interactions of individuals *within an international relations context* rather than on interactions of nation-states as actors.

Two of the more textbookish chapters in Part I are contributed by William Scott, on "Psychological and Social Correlates of International Images," and by Irving Janis and Brewster Smith, on the "Effects of Education and Persuasion on National and International Images"; nothing derogatory is intended here, since these are truly excellent surveys

of complicated areas. Anthropologist Robert LeVine utilizes data from primitive societies to demonstrate how *intra-tribal* hostilities—damped by multiple and dispersed loyalties and exacerbated by conflicting or localized loyalties—determine *inter-tribal* hostilities via the process of socialization. Noteworthy is the observation that reduction of hostility within a society appears to be accompanied by dehumanizing of "outsiders" and exaggeration of hostility toward them. Ithiel Pool evaluates the available literature on effects of interpersonal contacts across nation boundaries upon the traveler's and the host's images of Self and Other, and he concludes that the effects are *not* necessarily salubrious. Political scientists Karl Deutsch and Richard Merritt offer a very ambitious exercise—necessarily a bit loose but nevertheless impressive—in which the effects of events upon reinforcing, clarifying, and reorganizing national images (the dependent variable, indexed by extensive poll data) are predicted from a componential analysis of the events themselves, as being spectacular, cumulative, or government (and/or media) supported (the independent variable).

Psychologists White and Rosenberg are concerned with how national images bear upon policy decisions in the context of international conflict. Ralph K. White describes the "reality world" of the Soviet citizen (cf., Bronfenbrenner's paper in the Sperrazzo volume) and reports that Russians, like Americans, perceive WE as peaceful and THEY as threatening; both find the notion that the Other holds a mirror image incredible—the Soviets only more so. Milton Rosenberg believes that assumed "public opinion" would be less of a constraint upon innovation in policy by leadership if it were more finely analyzed and if its limitations were better understood. Analyzing polling data on cold-war issues and relating them to the dynamics of cognitive consistency theories, he comes up with suggestions as to how invalid or shaky "consensus" could be detected.

In Part II of the Kelman volume attention shifts from "image" to "action," but this shift is barely perceptible. Harold Lasswell sets the scene with a

rather pensive (and very untextbookish) consideration of national "climate" or "mood" and how it can predispose nations toward courses of action. He points out that objective estimates of these subjective national "states-of-mind" can be obtained through content analyses, but does not go into any detail. Psychologist Daniel Katz reads more like a political scientist in his detailed analysis of dimensions of nationalism in relation to preferred strategies of resolving international conflicts. The value-systems of nations may stress statism (sovereignty, authority), institutions (democracy, free enterprise, etc.) or cultural identification (ethnocentrism in the extreme form); nations may adhere to affective symbolic codes or pragmatic reality codes in maintaining these values; and these dimensions interact in different patterns as nations develop from revolutionary societies, through empire-building stages into technological, bureaucratic societies, and finally decay into retreatist or revivalist forms of nationalism. The burden of Katz's argument is that both the types of conflicts in which nations become involved and the salience of alternative modes of resolution are not capricious but rooted in their stage and structure at the time.

Details of the process of national interaction in conflict situations are analyzed by Dean Pruitt and by James Robinson and Richard Snyder. Psychologist Pruitt implicitly accepts the validity of generalizing from individual to nation as he discusses the complex interrelationships between threat perception, trust, and responsiveness, on the one hand, and conflict escalation or de-escalation, on the other. In sharp contrast—and perhaps a bit amusingly—political scientists Robinson and Snyder discuss the role of national officials *as individuals* in the development and execution of foreign policy decisions. Their focus is on decision-making as a process influenced by organizational variables, personality variables, and role variables. (A bit of their documentation that I must pass along is this: the greater a congressman's sense of insecurity, intolerance of ambiguity, or devaluation of the individual human—all gauged by content analysis of his

speeches—the more nationalistic his voting record!)

The remaining chapters in Part II deal, in one way or another, with direct, face-to-face interactions across nation boundaries. Jack Sawyer and Harold Guetzkow—who are probably as nearly balanced between political science and psychology as any social scientists could be—contribute a fine chapter on negotiation and bargaining that somehow simultaneously maximizes review, research, and textbook functions. The largely anecdotal literature on diplomacy is neatly blended with the experimental literature on two-person games, small group dynamics, and bargaining in other settings. As to the former, we learn, for example, that at the Peace of Westphalia in 1648 it took six months to decide in which order the delegates should enter the room! The only thing I miss in this chapter is sufficient consideration of the intimate interaction between negotiation (requiring prior commitments) and unilaterally initiated reciprocations, (operating on post commitments), the latter often “warming the atmosphere” for the former.

Political Scientist Chadwick Alger's chapter focuses on personal contacts in the U. N., and it is primarily a report on his own intensive research there. These interactions involve individuals who are playing national roles and individuals who are playing international roles (the secretariat), and both very seriously. Particularly interesting here are the learning experiences of the delegates. Sociologist Anita Mishler deals with cross-national interactions where the student participants are functioning as individuals rather than as official representatives; ease of relationship between foreign student and host is found to depend particularly upon the relative status of their nations (e.g., ex-colonial), the degree of cultural difference, and the embeddedness of the foreigner in his own culture.

THE one common theme of the three samplers under review is concern about the relevance of social-psychological research for international decision-making and policy formulation, and Kelman returns to this theme in his own “wrap-

up” chapter. It is relatively easy to establish relevance where behavior of individuals is the object of study. As to the broader questions of peace and war, however, “if . . . one regards war—as I do—as essentially a societal and inter-societal process, then the political relevance of what we are here calling the study of international behavior of individuals is not as obviously apparent.” It is most difficult to establish the relevance of social-psychological research for foreign policy decision-making. Kelman gives a penetrating evaluation of simulation techniques, concluding that the important question is whether the simulation operates like the real world in the respects that are critical for generalizing. I would like to suggest that both the past, by careful, comparative, historical analysis, and the future, by deliberately devised strategic probes under conditions of minimal risk, can provide “experiments” in the science of international relations where no generalization by analogy is required. *The Kennedy Experiment* (Etzioni, 1967) on reducing tensions vis-à-vis the Soviet Union is very much a case in point.

One of the frustrations in reviewing collections of papers is that there simply isn't space for more than glossing the individual contributions. This is especially the case with the Kelman volume, whose original papers certainly merit better treatment. I will simply assert that this book is a “must” for any psychologist with serious interests in research or teaching in the rapidly developing field of international behavior.



When you . . . can express what you are speaking about in numbers, you know something about it; but when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely in your thoughts advanced to the stage of science.

—LORD KELVIN



Operational Psychophysiology

Clinton C. Brown (Ed.)

Methods in Psychophysiology.

Baltimore: Williams & Wilkins, 1967. Pp. ix + 502. \$16.75.

Reviewed by RICHARD A. STERNBACH

The editor, Clinton C. Brown, is Associate Professor of Medical Psychology, The Johns Hopkins University School of Medicine, and a past president of the Society for Psychophysiological Research.

Richard A. Sternbach, the reviewer, is Associate Professor of Psychiatry and Research Associate, in the University of Wisconsin's Psychiatric Institute. He is author of *Principles of Psychophysiology* (CP, Sept. 1967, 12, 436) and *Pain: A Psychophysiological Analysis and co-editor with N. S. Greenfield of The Handbook of Psychophysiology, to be published by Holt, Rinehart & Winston.*

By any criterion, psychophysiology exists as a specialty and, indeed, flourishes. There is an organization of more than 500 active researchers (Society for Psychophysiological Research); a journal that it publishes (*Psychophysiology*); a text (by the reviewer) presenting basic concepts; a large body of organized knowledge (to appear in the forthcoming *Handbook of Psychophysiology*); and an increasing number of undergraduate and graduate courses in various universities. Now, happily, we can also cite specific books on techniques that, in effect, constitute operational definitions of the field. There is the English work edited by Venables and Martin, *A Manual of Psychophysiological Methods* that was reviewed here earlier (CP Aug. 1968, 13, 414) and the present volume edited by Brown.

What is special about psychophysiology is the relative emphasis on using human subjects, from whom multiple simultaneous physiological measures are obtained in response to various stimuli or conditions. Therefore this book should ideally present the rationales and tech-

niques for taking such measures for each physiological system, review the development of assessment procedures for each response variable, and indicate the applications of such methodology to areas of substantive interest. This volume comes close to achieving these goals.

Let us first consider some of the virtues of this book. There is a superb chapter by Edelberg on that favorite variable for psychologists, "Electrical Properties of the Skin," often referred to as the GSR (galvanic skin response). This chapter is a model for what such chapters should be, and I suspect it will be a standard reference for many years. Dykman's chapter, "On the Nature of Classical Conditioning" of physiological responses, is also clear and thorough, and will also enable a novice to get started or an old-timer to get a satisfying review. There is likewise an excellent general chapter by Geddes on "The Measurement of Physiological Phenomena," which explains clearly the physics and mathematics of recording, with pertinent examples and applications. These three chapters are so superior that, by themselves, they are worth the price of the book.

But there are other areas also competently treated, with separate chapters on such topics as: respiration; plethysmography (peripheral changes in blood volume); salivation; telemetry and telestimulation (for free-ranging subjects unencumbered by wires); the many uses of the laboratory computer (especially the LINC); and the use of tapes for data storage.

THERE are a number of defects, however, that must be mentioned. There is a disappointing chapter on "The Measurement of Biological Temperatures," that is pure physics with no examples of applications or findings. "Interarea Electroencephalographic Phase Relationships," by the late Chester W. Darrow, was a special interest of his and is probably too esoteric for the general reader; it should not have been given special emphasis in a separate chapter, but could have been made a part of the "Research Electroencephalography" chapter. The latter provides a

good practical guide for the beginning researcher, but could use some examples of research findings, especially with respect to the relationship between the EEG and other physiological variables. A chapter on the "Quantification of Olfactory Stimuli," reminiscent of the old psychophysics, seems strangely out of place in a response-oriented book, the more so since no relevant physiological applications are provided.

A problem, which has plagued psychophysicists for years, and continues to do so, is how to get a good *continuous* measure of blood pressure. The chapter "Measurement of Blood Flow and Blood Pressure" is disappointing, in that the author rather quickly concludes that present methods with human subjects are inadequate, and the bulk of the treatment is on animal preparations.

Most disappointing of all is the chapter, "Operant Conditioning." The operant conditioning of autonomic and electroencephalographic variables is one of the hottest areas in psychophysiological research today, but this chapter is only an introduction to the old Skinnerian techniques of behavior modification. The author writes, "Operant principles appear to apply only to motor acts and not to autonomic functions" (p. 299), a view contrary to recent findings and which cannot be attributed entirely to the time of writing (I presume it was in 1965) because Dykman, in his classical conditioning chapter, devotes several pages to autonomic operant effects.

A promising method of investigation is dealt with in a chapter on "Rheoencephalography," a technique for measuring cerebral blood flow that is little used in this country. History, techniques, and clinical examples are provided in a way that should encourage many investigators to make use of this approach.

In a book of this sort, more response systems should have been covered. A chapter each should have been provided for gastrointestinal measures (only briefly alluded to in the telemetry chapter), for electromyography, for eye movement and pupillary responses, etc. That is, some very major systems are simply not dealt with.

Yet all in all, the work is of sufficient

FEAR OF FAILURE

Robert C. Birney, Amherst College; Eugene Burdick, Oakland University; and Richard C. Teevan, Bucknell University. Fall 1968, about \$1.95 (paper), \$7.95 (cloth).

HUMAN SEXUALITY

James Leslie McCary, University of Houston. 1967, 374 pages, \$8.50.

PSYCHOLOGY: The Study of Behavior

Paul Swartz, University of Alberta. 451 pages, \$6.95.

TOWARD A PSYCHOLOGY OF BEING, Second Edition

Abraham H. Maslow, Brandeis University. 1968, 240 pages, \$2.25 (paper). Insight Book #5. David C. McClelland, General Editor. Robert C. Birney and Richard C. Teevan, Co-Editors. Enduring Problems Books.

THE ABNORMAL PERSON AND HIS WORLD: An Introduction to Abnormal Psychopathology

Paul J. Stern, Harvard University. 256 pages, \$5.75.

Send for your on-approval copies. Write College Department,

Van Nostrand

120 Alexander Street
Princeton, New Jersey 08540

merit to deserve a place in every psychophysiology laboratory, along with the Venables-Martin book with which it partially overlaps. In addition, any investigator (clinician or experimentalist) who intends to tap physiological responses of human subjects, would do well to acquaint himself first with these *Methods in Psychophysiology*.

New Ore From the Mine

William D. Neff (Ed.)

Contributions to Sensory Physiology. Vol. 2. New York: Academic Press, 1967. Pp. xi + 263. \$9.00.

Reviewed by HARLOW ADES

The editor, William D. Neff, received his PhD from the University of Rochester, has taught briefly at Swarthmore and Columbia University, was at the University of Chicago from 1954-1963, with a leave of absence to work in the laboratories of Bolt, Beranek, and Newman. He is now Head, Center for Neural Sciences, and Professor of Psychology at Indiana University. He also edited the first volume of *Contributions to Sensory Physiology*.

The reviewer, Harlow W. Ades, is Professor in the Department of Electrical Engineering, in the Department of Physiology and Biophysics and in the Department of Psychology, University of Illinois, Urbana. His PhD is from Illinois and he has taught at The Johns Hopkins University, Emory University, Northwestern, The University of Texas School of Medicine and spent some time as Head of the Neurological Sciences Division in the Research Department of the U. S. Naval School of Aviation Medicine before returning to Illinois.

THE second volume to *Contributions to Sensory Physiology* follows the

basic pattern established by Volume 1. It includes five separate articles representing the research and reflections of mature scientists. Volume 2 also follows the pattern of Volume 1 in that it represents a real contribution to a literature overburdened with symposium proceedings that are often repetitious of each other and of the prior journal articles from which each contributor has compiled the symposium presentation.

The first article by Willem A. van Bergeijk presents a particularly interesting account of the evolution of vertebrate hearing. The author obviously has an excellent grasp, both of the morphological evolution of the ear and of the available physiological evidence of the functional progression of a part of the lateral line system toward a specialized receptive system for airborne sound waves. In the experience of the reviewer, van Bergeijk's presentation is a unique and delightful integration of classical paleontology and comparative anatomy with a highly modern physiological approach. This is climaxed by the rapid and dramatic recapitulation seen in amphibian metamorphosis, that is, in no other organ system, so spectacularly portrayed as in the remارشaling of the bronchial arch structures from their fish-like status to a true receptive organ for airborne sound.

THE SECOND article by Irving T. Diamond also, as it happens, adopts the point of view of physiological evolution integrated with the morphological comparison of projection systems and developing neocortex. There is a wealth of comparative physiological data on sensory discrimination, especially that related to audition. Diamond has re-examined the salient trends of neurological thinking, especially with reference to comparative development and functional patterns of sensory neo-cortex. The general effect is that of clearing the air and redirecting certain trends of thinking. This reader happens to agree with the author in many respects and found the article highly stimulating. It is certainly required reading for anyone interested in central sensory systems and should be extremely useful to non-specialists in that the author, while

avoiding technical jargon that would restrict the audience, has nevertheless preserved technical integrity in a highly readable article.

The remaining papers, two on somatic sensory function by D. Albe-Fessard and B. S. Rosner and W. R. [unclear] and one by M. Sato on the relationship between temperature and gustatory response are of an equal quality with the first two papers. In particular Mme. Albe-Fessard's account of the organization of somatic central projections describes many of the experiments in her laboratory and integrates these with the experiments of others into what must become a classical treatise. The article deals primarily with somatic projections to diencephalon and telencephalon and connections made at those levels, and largely excludes considerations of effective connections made by these systems at lower brain stem levels.

The editor is to be commended on his choice of authors and encouraged to continue with further volumes rapidly as developments in the field warrant. At the present pace there should be no danger that the available ore will be over-mined.

Further Essays for the Left Hand

Jerome S. Bruner

Toward a Theory of Instruction. Cambridge, Mass.: Belknap Press of Harvard University Press, 1966. Pp. x + 176. \$3.95.

Reviewed by ROBERT S. DAVIDON

The author, Jerome S. Bruner, is well known to CP's readers. A past President of APA and recipient of its Distinguished Scientific Award, he is Professor of Psychology and Director of

the Center for Cognitive Studies, Harvard University. He is co-author of *Studies in Cognitive Growth* and author of *On Knowing: Essays for the Left Hand*.

The reviewer, Robert S. Davidon, is Associate Professor of Psychology at Bryn Mawr College. Since his review of volumes on color (CP, Aug. 1964, 9, 306) his study of perception has led him from research on intermodality judgment of length with college students as subjects to a scale of visual distance of 6-year-olds. His PhD is from the University of Pennsylvania. He spent last year on sabbatical at the Laboratoire de Psychologie Expérimentale, Aix-en-Provence.

THE right hand symbolizes order and lawfulness. "Reaching for knowledge with the right hand is science." In the present essays, as in a companion volume (*On Knowing*, 1962), Bruner probes and thrusts with his left.

A theory of instruction is readily distinguished from a psychologist's theory of learning; and, by its specificity, Bruner's theory of instruction can be distinguished from the educator's philosophy of education. A theory of instruction is prescriptive and normative. It indicates the most effective way of achieving knowledge or improving skill, sets up criteria or standards, and specifies conditions for meeting them. A theory of learning, on the other hand, is essentially descriptive—as are current psychological theories of cognitive development. That is not to say, however, that theories of learning and development are irrelevant to a theory of instruction.

A theory of instruction identifies the experiences that most effectively provide a predisposition for a particular type of learning, or for learning in general. It indicates the ways in which a body of knowledge should be structured so that it can be most readily comprehended, and it specifies the most effective sequences for the presentation of materials. Furthermore, it provides for the selection and pacing of rewards and punishments in learning and teaching. If there is to be a shift from extrinsic to intrinsic reward, and from immediate to deferred reinforcement, the

timing and conditions for the change must be specified. "Instruction is a provisional state that has as its object to make the learner or problem solver self-sufficient."

Much of growth, according to Bruner, depends upon the child's increasing freedom from stimulus control. As mediating processes develop, there is increasing independence of the response from the immediate stimulus.

MENTAL GROWTH is not a gradual accretion, either of associations or of stimulus-response connections or of anything else, but rather a series of spurts and rests. Different investigators have proposed stages of mental development. Although he recognizes the typical order of function—knowing through manipulation and action, through perceptual organization and imagery, and through symbolic operation within a language—Bruner considers these not as stages of development but as parallel evolving systems of processing information, systems that receive different emphases at different ages in childhood.

Early in the volume Bruner disposes of one matter, Jean Piaget's contribution to the study of growth. First, he applauds him as "the most impressive figure in the field of cognitive development today." Then he asserts that anyone who thinks that Piaget's principal mission is psychological is mistaken. No, it is epistemological. In no sense does Piaget's descriptive work constitute an explanation or a psychological description of the processes of growth.

Several exploratory studies are briefly reviewed, studies that illustrate Bruner's progress toward a theory of instruction. All are conducted and described with imagination and erudition. All provide observations under unusually favorable conditions for learning and teaching. Mathematics, social studies, and language were the subjects selected, and the level of instruction required professional background in mathematics, in anthropology, psychology and sociology, and in linguistics. In one experimental program, for example, four 8-year-olds had a supplemental program of instruction in mathematics for one hour a day, four times a week, for six weeks. There

were six teachers present simultaneously, including a Harvard professor of mathematics and one of psychology. Even then, the children's progress and success with quadratic functions remains impressive.

Encouraged, Bruner calls for psychologists to reenter the field of education, and to adopt a new approach, centered on a theory of instruction and distinct from what has been known as educational psychology. "Something happened to educational psychology a few decades ago that brought it to the low status it now enjoys."

On the final page, in retrospect, Bruner refers to his essays as "gropings," directed to the task of building a theory of instruction. "They are marred by the fault of too little data, too little systematic observation, too sparse an arsenal of analytic tools."

His left hand has provided the lead. The cultivation of intellectual growth demands two hands.



Knowledge, wrote the author of the preface to a work by one of the most eminent of the new science, 'in great measure is become mechanical.' The exact analysis of natural conditions, the calculations of forces and strains, the reduction of the complex to the operation of simple, constant and measurable forces, was the natural bias of an age interested primarily in mathematics and physics. Its object was 'to express itself in terms of number, weight or measure, to use only arguments of sense, and to consider only such causes as have visible foundations in nature; leaving those that depend upon the mutable minds, opinions, appetites and passions of particular men to the consideration of others.

—R. H. TAWNEY



Hobgoblins and Science

Shel Feldman (Ed.)

Cognitive Consistency: Motivational Antecedents and Behavioral Consequents. New York/London: Academic Press, 1966. Pp. xiii + 312. \$8.50.

Reviewed by EZRA STOTLAND

The editor, Shel Feldman, received his PhD from Yale University and was Research Assistant Professor at the Institute of Communications Research, University of Illinois. He is now Assistant Professor in the Anneberg School of Communications, University of Pennsylvania. His interests are in impression formation and non-verbal behavior in dyads, psycholinguistics, and peace.

The reviewer, Ezra Stotland, is Professor in the Department of Psychology, University of Washington. His PhD is from Michigan. He is interested in cognitive processes relevant to interpersonal relations and to motivation, in experimental studies of empathy, and in birth order. He is co-author of *The End of Hope: A Social-Clinical Study of Suicide and Life and Death of a Mental Hospital*.

THE IMPRESSION one gains from this valuable collection of 10 papers concerning consistency theory and research is that of a group of post-Columbian explorers attempting to map out the New World that has just been discovered, arguing about its size, shape, value, place among the other continents, and so forth but none arguing that it is not there. Some maintain that they have traveled the New World and then kept going, returning to their home ports, finding the New World much like the old. Some of these even return with claims for their home country on some of the territory of the New World. The

main point is that the New World of consistency theories is solidly under foot, but detailed mapping and "depth studies" have just begun.

This image of 10 arguing psychologists is, nevertheless, rather overdrawn. Apparently independently of one another, they have hit upon several general themes. The most "consistent" theme is that a much more analytic, precise, differentiating approach to both theory and research would help resolve many difficulties with consistency theory. The theoretical ambiguities in consistency theories are well documented by McGuire, in the opening paper, "The Current Status of Cognitive Consistency Theories." Among the ambiguous notions are those of "obverse" in dissonance theory and the negative U relation in balance theory. The reaction of many of the authors to these ambiguities is that more theoretical exactness is a necessity. Where there has been one concept, let there be two, or more. For example, Singer in his paper "Motivations for Consistency" makes a distinction between cognitive consistency conceived as a style of acquiring new information and conceived as a process of maintaining consistency between already acquired cognitions. He also distinguishes between a person's cognitive consistency concerning several different objects of cognition and the consistency of cognitions about one object. Rosenberg's paper, "Some On Limits of Dis-

sonance: Toward a Differentiated View of Counter-Attitudinal Performance" suggests that dissonance reduction behavior may be limited to "simple and limited" acts rather than more complex areas. Feldman in a paper, "Motivational Aspects of Attitudinal Elements and Their Place in Cognitive Interaction," argues for the value of distinguishing among the importance, strength, and salience of cognitive elements. In a paper called, "The Relationships between Beliefs, Attitudes and Behavior," Fishbein maintains that the concept attitude be limited to an evaluative or affective response and an implicit one at that; and that beliefs and actions be distinguished even from the attitudes with which they are associated. In many of these cases the arguments are backed up cogently by data, so that the empirical implications of these theoretical distinctions are made explicit. Nevertheless the variety of the distinctions that are suggested, with only an occasionally perceivable relationship among them, leaves one bewildered. There is obviously a danger of falling into a trap of making distinctions for the sake of distinction, even when there are data suggesting the value of making them. Their value may be overgeneralized from these data. The ultimate criterion of the theoretical usefulness of a distinction is that it helps to resolve some of the apparent inconsistencies within the whole sets of related pieces of research.

IN a parallel fashion, a number of the writers point out that much more precision is needed in the experimental methodology. Weick's paper is a veritable encyclopedia of the diverse possible routes that a subject may take within any given dissonance experiment and of all the many complex changes that might occur as the subject proceeds along each of these routes. His message is clear; more precise, temporally limited measurements are a necessity. Likewise Pepitone points out that the size of the elements involved in any dissonance situation needs to be specified. Singer argues for the need to measure the actual motivational state resulting from a dissonance experimental manipulation.

The argument for more experimental precision takes on more power because the volume contains a fascinating example of the results of a lack of precision in some experiments; that example is the debate between Aronson and Rosenberg with respect to the effects of actions taken with "insufficient justification," especially those which are counter-attitudinal. Aronson, of course, argues for the dissonance reduction interpretation. Rosenberg effectively rebuts the former's arguments and presents a more multifaceted interpretation in terms of subjects' anxieties about being evaluated by the psychologist-experimenter, in terms of incentive theory à la Janis, and, in "limited and simple situations," in terms of dissonance reduction theory itself. The debate itself is a choice item on the menu, but one wishes that Aronson had had a chance to reply to Rosenberg, and the latter a chance to reply to the reply.

Nevertheless, one comes away from the debate with the feeling that it is an impossible one to resolve through research so long as the experimental manipulations in the relevant research are complex, over-subtle, full of all sorts of ingenious ploys to make the experiment plausible to the subject, etc., etc. Such complex ploys, which are technically fascinating to the experimental social psychologist, often make an experiment a powerful one in producing results, but the general implications of these results are often quite ambiguous because of the ploys themselves. Much of the Aronson-Rosenberg debate dissolves into unresolvable arguments about how the subjects "must" have perceived a particular complex experimental manipulation; one gets the impression that the manipulations are almost useful projective techniques for the subjects. All of this might have been avoided if some of the methodological prescriptions made by some of the other authors in this volume had been adhered to. On the other hand, the phenomena that these powerful yet ambiguous experiments uncover are obviously of great social and psychological importance and the experiments should be greatly lauded for calling attention to them. However, the period has come for simpler manipulations and more precise

and temporally specific measurement techniques; as McGuire puts it, the classic period is over.

ANOTHER theme running through a number of papers is the great need to articulate the relationship between motivation to reduce inconsistency and motivation of other types. Several writers, such as McGuire, Singer, and Pepitone are concerned with the apparent conflict between consistency motivation and curiosity seeking, stimulus hunger, etc. Another approach to the issue of motivation is Feldman's, which is based on the individual's expectation of his acting overtly so that he must resolve inconsistency in order to act consistently. This approach has at least some resemblance to Jones's and Gerard's (1967) idea of unequivocal behavioral orientations. Pepitone has an especially interesting discussion of the many possible motivational bases of consistency seeking, but favors one based on the need for valid cognitions, i.e., confirmed expectancies. This reviewer feels that ultimately the most valuable aspect of this remarkable collection of papers will be the focusing of attention of psychologists on the problem of motivation for consistency. Much of the Aronson-Rosenberg debate and many of the theoretical and research issues mentioned above basically concern motivation.

This review can hardly do justice to many of the fascinating bits of research reported (e.g., by Abelson and Kanouse) and the many other issues raised by specific authors, but he would like to report that McGuire's writing in his overview is unmatched as a combination of fun, thoughtfulness, and scholarship. The uneven quality of some of the subsequent writing is inevitable in a collection of papers, but the papers that need to be re-read to grasp completely are worth the added effort.

REFERENCE

- JONES, E. E. and GERARD, H. B. *Foundations of social psychology*. New York: Wiley, 1967.



A Junior Branch of Psychiatry

Leslie Y. Rabkin and John E. Carr (Eds.)

Sourcebook in Abnormal Psychology. Boston, Mass.: Houghton Mifflin, 1967. Pp. vii + 519. \$4.95.

Reviewed by BRENDAN MAHER

The first editor, Leslie Y. Rabkin, received a 1963 PhD from the University of Rochester. He was a USPHS psychiatric intern at Tavistock Clinic, London, before receiving his PhD. He has stayed on at Rochester and is now Assistant Professor. The second editor, John E. Carr, a Syracuse University PhD, is now an instructor in the College of Medicine, University of Washington.

Brendan Maher, the reviewer, received his PhD from Ohio State University and has taught at Northwestern, Louisiana State University, Harvard University, The University of Wisconsin and is now Professor of Psychology at Brandeis University. He is author of *Principles of Psychopathology*, editor of *Progress in Experimental Personality Research*, and has a short book coming, *Introduction to Research in Abnormal Psychology*.

A BOOK of readings, such as this one, is a teaching aid and cannot be judged as a contribution to the literature of psychology. This book can therefore be reviewed mainly in terms of the internal coherence of the selection of papers, and of the validity of the picture of abnormal psychology that it implies.

What picture of the current state of psychopathology is valid? At the risk of oversimplifying matters we can recognize two general emphases in the definition of the field. By far the most popular view—in terms of textbook orientations, presentations in the mass media, etc.—is that abnormal psychology is a junior branch of psychiatry. That is to say that the working concepts presented to the student reader are derived in the main from psychiatric

case observation and more particularly from observations made in a psychoanalytic framework. Contributions from experimental psychology are neglected, quantification of observation is the exception rather than the rule, and there is little continuity between the conceptual language employed and that used in the rest of the behavioral sciences in general. In recent years there has been some shift of focus from the study of the single case to the study of the family and the community; there has not been, however, any major accompanying change in the conceptual structure with which these new units are observed or the theoretical preferences that determine the interpretations that are made.

In the last few years there has been a growing interest in the major viable alternative, namely the application of general principles of behavioral science to psychopathology, the use of experimental techniques to study clinical problems and the integration of the field of abnormal behavior into the body of general psychology. Over the same years there have been new and exciting developments in the biology of psychopathology, particularly in genetics, biochemistry generally, and psychopharmacology.

RABKIN AND CARR have opted for the psychiatric definition of psychopathology. Papers drawn from psychiatric and medical journals total thirty-three, a significant share of the fifty-eight contributions. From psychological journals the editors have found six papers worthy of inclusion, none of them from the *Journal of Abnormal Psychology*, or the *Journal of Personality*. Psychoanalytic theorizing takes pride of place, although space is given to three papers sympathetic to the learning therapies. No contributions are included from experimental psychopathology; the one experimental paper is Weiner's classic study of duodenal ulcer. Seven papers report quantitative data, of which number only one (Weiner's) reports statistical tests of significance. The family-interaction paradigm is well represented (eleven papers). Biochemistry, psychopharmacology, and genetics are scarcely represented at all, although

two papers make passing reference to genetic possibilities.

Clearly this book should appeal more to one kind of instructor than another. To those who preserve the conventional quasipsychiatric view this selection will

appear as a representative and reasonable candidate for assignment as a supplementary reader. For those others who look for a more balanced view or detailed research reports it will very probably prove to be a disappointment.

Two More to Go

Susanne K. Langer

Mind: An Essay on Human Feeling. Vol. 1. Baltimore: The Johns Hopkins Press, 1967. Pp. xxiii + 487.

Reviewed by CARROLL PRATT

The author, Susanne K. Langer, is a research scholar and Professor Emeritus of Philosophy at Connecticut College. She has several honorary degrees including a Doctor of Laws from Columbia, as well BA, MA, and PhD degrees from Radcliffe College. She has also studied at the University of Vienna. She has authored many books including Introduction to Symbolic Logic and Feeling and Form, and, what is probably her most famous publication, Philosophy in a New Key.

The reviewer, Carroll Pratt, has now done so many reviews for CP that readers must have memorized his biography. He is Professor Emeritus of Princeton University and an active Professor of Psychology at Rider College. He says that Susanne Langer is one of his favorite writers but that parts of the present volume are beyond his depth.

THIS impressive tome is the first volume of a trilogy in which Dr. Langer has set herself the formidable task of solving the ancient problem of what is meant by *Mind*. The work is intended to be a complete philosophy of mind and thus does not directly concern those who are involved in the more prosaic

business of trying to put together a science of mind, a job that Mrs. Langer seems to think most professional psychologists, especially those of the brass instrument persuasion, have botched rather badly. Yet if psychologists have the time and patience to read this book, they will find it stimulating and irritating, pontifical and at times amusing, although the author most certainly did not mean to say anything the least bit amusing. Langer is in dead earnest.

The most entertaining parts of the book, at least for the psychologist, are some of the sections in the chapter on the idols of the laboratory in which with calm finality Langer renders judgments about the quality and value of various efforts in the young "science," as for example when she proclaims that the "sweeping piecemeal-learning theory of D. O. Hebb, whose brilliant neurological hypothesis, set forth in *The Organization of Behavior*, is followed by an unimpressive psychology" (p. 176).

In spite of Langer's misgivings about psychology as a science, she frequently turns to that nasty little subject, as William James once called it, and in

true philosophical fashion picks and chooses whatever suits her purpose. Her erudition is well nigh staggering in its scope and depth. The footnotes and bibliography alone are worth the price of admission. Her style is so elegant and sure that the book is a delight to read. Unfortunately some of the words she uses for her important concepts have so many different meanings that discussions about the book are likely to get bogged down over definitions.

Langer is a logician of such outstanding distinction that I should think she might have invented some words and then given them hard and fast operational definitions. As she herself says, "Old words with new meanings are treacherous" (p. 108).

MIND is feeling, and for Langer feeling would seem to be coextensive with what an older psychology called consciousness. "Feeling in the broad sense of whatever is felt in any way, as sensory stimulus or inward tension, pain, emotion, or intent, is the mark of mentality. In its most primitive forms it is the forerunner of the phenomena that constitute the subject matter of psychology. Organic activity is not 'psychological' unless it terminates, however remotely or indirectly, in something felt" (p. 4). "The entire psychological field—including human conception, responsible action, rationality, knowledge—is a vast and branching development of feeling" (p. 23). Feeling is a phase of physiological process, not a product or new metaphysical entity, and when thus recognized the body-mind problem disappears. "Where iron is heated to a critical degree it becomes red; yet its redness is not a new entity" (p. 21).

Feeling plays such an enormous role in Langer's theory of mind that it obviously carries a weight of meaning far heavier than it ever had in general psychology. Beebe-Center's valiant struggle with the subject brought some clarity to the concept, but not enough to make it a safe word to use in a philosophy of mind. (Beebe-Center is not mentioned, as far as I know, in any of Langer's writings.)

In the chapters on art, a subject in which Langer is a recognized authority, a good deal is made of primary and secondary illusions, whatever they may be. The organization of tension, especially in music, is a means of expressing feeling. Such a feeling is a primary illusion. The incompletely developed sense of time and space is a secondary illusion (pp. 157-230). Why are they illusions? If they are somehow heard in the music they must be phenomenal events, and the preferred procedure today is to discover the correlation between such events and their stimuli. Some correlations are close, some are not. And that's that. To call some phenomenal events illusions is to give them a baffling ambiguous status. Music has been a source of delight to many people, and now Langer tells them it is all illusion. Well, perhaps that is as it should be. *Les illusions sont ce que nous avons de meilleur ici-bas.*

THE most powerful concept in the book and in the two volumes to come may turn out to be that of the *act*. All sciences tend to deal with their data as things, objects that are pushed and pulled about. Langer prefers to look upon nature as an on-going process of acts within acts, rhythms within rhythms that build themselves into the dynamism of a living body. "The study of living functions as acts leads backward into the physical sciences without coming on a dividing line" (p. 274). The concept is too involved to present in a short review, even if I understood it; and in any case needs further elucidation in the volumes that Langer is preparing. Franz Brentano is only mentioned in passing, and is incorrectly named in the index as Bettina Brentano—the aunt of the psychologist, if I am not mistaken. Students who have struggled with Brentano's act psychology will find confusion only worse confounded by the acts of Langer.

I am a bit distressed to realize that what I have said about Langer's book sounds as though I were damning it with faint praise. Well, so be it. The book is a stunning achievement, a scholarly edifice of intricate detail. But what does it all mean? Philosophers will

probably know what Langer is driving at, but I am afraid that psychologists will not know what to make of some of Langer's ideas. Final judgment will of course have to wait upon the appearance of the second and third volumes. The trilogy may indeed be a *magnum opus*, and my great esteem for Susanne Langer leads me to hope that it will be just that.

Quantification More than a Beginning

William L. Hays

Quantification in Psychology. Belmont, Calif.: Brooks/Cole, 1967. Pp. viii + 87. \$1.75, text; \$2.25, trade.

Reviewed by B. J. WINER

The author, William L. Hays, received his PhD from the University of Michigan, and is Professor of Psychology at that institution. He has done original work in the area of multidimensional scaling—particularly the generalization of Coombs's unfolding technique. He is author of *Statistics for Psychologists*.

B. J. Winer, the reviewer, is Professor of Psychology at Purdue University. His PhD is from Ohio State University and he is author of *Statistical Principles in Experiment Design* and former Managing Editor of *Psychometrika*. His research and teaching interests are in psychometrics and applied statistics.

THIS short volume is one of a series of paperbacks in the *Basic Concepts of Psychology Series*, edited by Edward L. Walker. This series was conceived to provide a flexible text for a beginning course in psychology. In addition to this work, Hays has authored the *Basic Statistics* volume in the same series. The reading of the volume under review presupposes, in part, the con-

cepts of classical statistics covered in the *Basic Statistics* text.

Much more comprehensive treatment of scaling methods is contained in this volume than is given in the usual "chapter" on quantitative methods currently in vogue in a first course in psychology—even Eugene Galanter's *Textbook of Elementary Psychology* is incomplete relative to the Hays' coverage of scaling. The Hays volume is both extremely well written as well as technically sound. It will probably be of greater utility for a second-level course with emphasis on methodology than it will be for a beginning course.

In his Introduction, the author indicates that a large part of the volume "concerns methods for arriving at a numerical score from behavioral data. . . . The essential theme running through this book is that any measurement problem must have a definite rationale based in part upon theoretical considerations and in part on actual empirical evidence."

The first chapter describes what the author calls measurement of psychological entities. Here the author defines measurement as an operation whereby observations are classified into categories represented either by a label, a number, or other symbol. The unique problems in psychological measurement, contrasted with physical measurement, are discussed.

The second chapter is concerned with the measurement of stimulus characteristics. Here the reader is introduced to the problems of psychophysics and psychometrics. This chapter represents the heart of the book.

After a brief description of the contributions of Weber and Fechner to the study of psychophysics, the author turns to the problem of scaling of psychological stimuli. In contrast to psychophysics, here one does not attempt to relate the "psycho" to the "physics" of stimuli.

A RELATIVELY complete coverage is given to the classical Thurstonian methodology—pair comparisons and comparative judgment laws are given detailed coverage. Also considered are scaling

techniques based upon rank orders, successive intervals, categorical judgment.

Noticeably absent is any mention of unfolding methodology and multidimensional scaling, which are areas of current vigorous research. (Both of these areas represent work in which Hays has made original contributions.)

Concluding the second chapter is a section on rating scales in which the method of equal-appearing intervals is used in the analysis of the data. This section provides a good example of how an underlying theoretical rationale for measurement is used in scaling data.

Compared to the coverage in Chapter 2, the material on the measurement of subjects in Chapter 3 is relatively brief. In the discussion of mental and attitude measurement, the concepts of reliability

and validity are introduced and their role in measurement presented. The degree of success of a measurement technique is tied to predictive validity. In this context Hays concludes that "Both validity and reliability are ultimately questions of the predictive goodness of the values obtained—the extent to which the values obtained by measurement are related in the right ways to the right things."

In the opinion of the reviewer, the Hays volume represents the best introduction to quantification in psychology that has yet appeared in print. It may not be written at a level sufficiently elementary for a beginning course, but it does represent something more than a quantitative beginning.

Wonderland Comes to Alice as a Text

Richard F. Thompson

Foundations of Physiological Psychology. New York: Harper & Row, 1967. Pp. xvii + 688.

Reviewed by PAUL R. CORNWELL

The author, Richard F. Thompson, is Professor of Psychology at the University of California, Irvine. He received his PhD at the University of Wisconsin, working under W. J. Brogden, studying stimulus generalization of tones in the cat. He got his start in neurophysiology in C. Woolsey's laboratory, also at Wisconsin, working on the organization of the cat's association cortex. He has continued this work at the University of Oregon Medical School and now at Irvine.

Paul R. Cornwell, the reviewer, is Assistant Professor of Psychology at Pennsylvania State University. He worked with R. A. McCleary as a graduate stu-

dent both at the University of Michigan and the University of Chicago on the initiation and suppression of responding and on the role of the cortex in discrimination of auditory patterns. He took a postdoctoral fellowship under R. W. Doty at the University of Rochester.

SELECTING a text for a course in physiological psychology used to be easy because Morgan and Steller's book (2nd ed.) was the only major textbook in the area. Morgan's third edition now has competition from four full-sized texts and several books covering selected topics in the neurological mechanisms of

behavior. The four new texts are by: Altman (1965), Deutsch and Deutsch (1965), Grossman (1967), and Thompson (1967). Of this group, Thompson places the most emphasis on the neurophysiological foundations of physiological psychology. Thompson has written a text that relates the wonderland of modern neurophysiology to behavior. Roughly, the first half of the book presents the modern neurophysiology and the second half relates it to behavior. A brief introduction on history and metapsychology is followed by a section on basic electricity and chemistry that probably can be skimmed by any student who has had good courses in high school physics and chemistry. The main portion of the book begins with a superb chapter on research techniques. The illustrations in this chapter carry a good part of the teaching load and both the author and publisher should be commended for the excellent reproductions of photomicrographs, something rare in books at this price. A careful treatment of methodological problems permeates almost every succeeding chapter and shows the relationship of technique, speculation, and careful experimentation. The sections on selective attention and on habituation and learning are particularly good examples of the care taken by Thompson to show how behavioral, physiological, and sampling methodology are all crucially important for conducting a good, and interpretable, experiment. The treatment of such basic topics as membrane potentials, synaptic transmission, and patterns of neural activity is thorough enough that the concepts introduced in the early chapters can later be used successfully for explaining more complex phenomena. Altogether, it is the excellent foundation chapters that enable Thompson to be so consistently reductionistic in treating behavioral problems like perception and learning. On this score none of the other texts comes close to matching Thompson.

ONE of the most impressive aspects of the later part of the text is that, despite an emphasis on the underlying neurophysiology, it is concerned primarily with behavioral problems and

issues. Consideration of behavioral problems should not be surprising in a psychology text, but in physiological psychology it is terribly easy to begin with a question "What mechanism mediates this behavior?" follow this question with "How does this presumed mechanism operate?" and, after shifting questions, neglect the original behavioral problem. Thompson seldom makes this mistake. He uses neurophysiology as a way of attacking behavioral problems, not as a way of shifting the emphasis from psychological problems to physiological ones. The chapter on learning is a nice illustration. It discusses many different animal preparations, as diverse as invertebrate ganglion systems and whole rats, in terms of attacking the basic associative problems.

Thompson devotes little or no space to several areas traditionally included in texts of physiological psychology. There is relatively little space devoted to lesion-behavior studies of learning and perception in the Lashley tradition, although there is an excellent discussion of the difficulties in making inferences about normal neural mechanisms from such studies. Human clinical studies of speech and cerebral dominance are given only a page or two, and the section on motivation is relatively short in comparison to its traditional emphasis in physiological psychology.

THE CHAPTER on motivation and emotion puzzles me. On first reading it seemed definitely below the level of the rest of the text. After several readings it still seems that way, but I can not put my finger on exactly what is wrong with it. I think that the insertion of some trite figures is a symptom rather than a cause of the weakness. Perhaps some of the trouble stems from taking too eclectic and critical an approach to the concept of motivation. Three pages are spent in showing how difficult it is to specify what motivation is. One result of this introduction seems to be that the reader is left with little framework on which to hang the various motivational facts. The rest of the chapter is more a compendium of loosely related studies than a tightly woven integration of fact and theory. There is often little attempt to make

sense of seemingly contradictory data, as in discussing the relationship between self-stimulation and conventional reinforcement. Also, little is said about possible functional relations of the hypothalamic and limbic systems with other parts of the brain. For instance, earlier in the book Thompson speculated that the neocortex, "may be the final common path for behavioral response tendency," yet in the motivation chapter he fails to offer any suggestions on how activity in the limbic system or hypothalamus might alter the likelihood that such response tendencies will result in behavior. Students of instinctive behavior will be disappointed to find no attention given to the possibility that species differences in hypothalamic and limbic function might correspond to species-specific behavior patterns. As a final note I should mention that Thompson's research activities have not been primarily concerned with motivation, so perhaps we should not be surprised that this topic is not covered as well as others. As an alternative to Thompson, P. M. Milner's text contains an excellent discussion of motivation. Unfortunately, Milner's book is still in the prepublication phase and is only "sometimes available from the McGill University Bookstore."

In summary, a relatively weak chapter on motivation does not keep Thompson's from being an excellent text. One irritating aspect of the book, however, is the inordinate number of typographical errors in the text and the figures (and I didn't check the references or the index). Despite these shortcomings it should see wide use on both the undergraduate and early graduate levels. I strongly recommend it as a student text and also as a refresher course for any non-physiological psychologist who has been out of graduate school for more than five years. In addition to summarizing the recent advances in the neural sciences, Thompson also gives an adequate treatment of the methods by which the advances were made. It is the only text available, with the exception of Teitelbaum's small monograph and Milner's "sometimes available" text, that I recommend to colleagues who want to learn what physiological psychology is all about.

The Facts of Observation in Psychoanalytic Supervision

Joan Fleming and Therese F. Benedek

Psychoanalytic Supervision: A Method of Clinical Teaching. New York: Grune & Stratton, 1966. Pp. x + 252.

Reviewed by RUDOLF EKSTEIN

Both authors, Joan Fleming and Therese F. Benedek, are at the Chicago Institute for Psychoanalysis, Fleming as supervising analyst and Dean of Education, and Benedek as supervising analyst.

Rudolf Ekstein, the reviewer, is Training Analyst, Los Angeles Psychoanalytic Society and Institute, and Director of Project on Childhood Psychosis, Reiss-Davis Child Study Center, Los Angeles. He, with Robert Wallerstein, is author of *The Teaching and Learning of Psychotherapy*, and is author of *Children of Time and Space, of Action and Impulse*.

MORE than a quarter of a century ago Siegfried Bernfeld (Bernfeld, 1941), one of the few master teachers of psychoanalysis, placed stress on *facts of observation* in psychoanalysis. Of course, he was concerned with the research methods of psychoanalysis. Rather than emphasizing traditional steps in scientific methodology that begin with the observation and gathering of facts, he began with the fact of clinical observation itself and the development of the analyst as an instrument of research and treatment. That training goal is stated by Fleming and Benedek as follows:

"To make self-analytic functions readily available equipment for working as an analyst is the basic and continuing goal of psychoanalytic training."

The authors study supervision processes through unique methods of observation, collection, selection, and analysis of data. These data on the learning and teaching processes are available only because of the special observational methods and teaching techniques employed. Their concept of supervision, neither to be confused with the analytical situation, nor to be seen simply as a didactic process, stresses the "experiential nature of psychoanalytic learning." A simile of Bernfeld may bring the issue nearer to the reader, Bernfeld uses a trivial event in which a friend telephones, saying he urgently needs to see him. The friend arrives; they engage in light conversation, but Bernfeld feels that what his friend is talking about is not what he came to talk about. To his direct question, the friend replies unconvincingly that there was no special reason for calling on him. The conversation drags. By chance, Bernfeld notices that the door of the room is open and automatically closes it. "By the way," says his friend, "would it be possible for you to lend me ten dollars? But please don't tell anybody!"

It is clear that the closing of the door created an atmosphere of confidentiality that permitted the friend finally to express a request that was very embarrassing to him.

Psychoanalysis can be considered a method of overcoming resistances in the

psychoanalytic dialogue by means of "closing doors." But we must realize that this closing of doors, which allows us to discover and observe data that otherwise might remain hidden, unknown, and inaccessible, is a highly sophisticated process, reaching material previously unknown not only to the analyst but to the patient as well. The combination of interpretation and free association within the conditions of the analytical situation causes a closing of doors and an opening up of new ways of observation that allows us to see new facts.

Fleming and Benedek set out to make use of these methods in their study of what goes on in and between students and supervisors during the process of supervision of therapy. They used students' recorded material of analytical sessions with patients, their own electrically recorded supervisory sessions, the transcripts of such sessions, and their recorded self-observations. Both researchers studied each other's material. Careful attempts were made to safeguard confidentiality with regard to students as well as patients. An enormous amount of data was scrutinized, analyzed, and selected in order to document typical aspects of learners' problems in the initial, middle, and end phases of supervision. The special challenge of this work lies in the enormous complexity of the data: there is the personal analysis of the candidate and its influence on his learning; the patient's material; the supervisory situation with its differing learning and teaching styles of candidate and supervisor—a labyrinth indeed of data of which the authors provide almost too much, in addition to their honest self-scrutiny.

THE stress of the authors' interest is on the interaction between supervisor and candidate, a preference that stems from viewing this process as analogous to the analytic, therapeutic process itself. The unique contribution of the clinical professions—social work, psychotherapy, psychoanalysis—to learning and teaching, as demonstrated in the process of supervision, has indeed "closed doors" and thus permitted us to discover new sources of learning; has

helped us to discover learning styles and learning resistances, and has opened, as this volume proves, new methods of studying the learning and teaching of psychoanalysis and other helping methods.

Wallerstein and I once spoke about a parallel process, as we demonstrated certain common denominators between learning psychotherapy through supervision and getting well by means of psychotherapy (Ekstein & Wallerstein, 1958). Fleming and Benedek refer to the learning alliance which they compare to the therapeutic alliance. It seems to me that this comparison is a useful one, but as in the case of the notion of the parallel process, borrowed from social casework supervision, which Wallerstein and I used, it neglects a more concise attempt to define the differences between the learners' and the patients' problems. I refer to those wide areas of learning resistance, those "open doors" that block progress, generally summarized as being analogous to the analyst's transferences and countertransferences *vis à vis* the patient. We might suggest that future study stress not only the learner's capacity for the learning alliance but include the supervisor's abilities as well in developing a teaching-learning alliance. In the meantime, Benedek and Fleming have essayed a courageous inroad into jungle land, and have opened new vistas as they challenge us to join them in improving on methods of observing facts and learning to utilize the new facts revealed by such detailed observation of supervisory processes.

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For where science is lacking there is ignorance, since ignorance is the opposite of science.

—ST. THOMAS



Set: A Concept in General Psychology

Dmitrii Nikolaevich Uznadze. Transl. by Basil Haigh

The Psychology of Set. New York: Consultants' Bureau, 1966. Pp. xvii + 251. \$15.00.

Reviewed by RAYMOND L. HERTZOG and JOHN HRITZUK

The author, Dmitrii Nikolaevich Uznadze, is Founder of the Research Institute of Psychology within the Academy of Sciences, Georgian S. S. R. He is author of General Psychology, Child Psychology, and The Experimental Basis of the Psychology of Set. He is further identified by the reviewers.

The reviewers, Raymond L. Hertzog and John Hritzuk, are both Assistant Professors in the Department of Educational Psychology, The University of Calgary, Canada. They both did doctoral theses in set theory, the former in psycholinguistics, the latter in personality. They are continuing research in the area. They are also translating and editing several volumes on set, as well as other volumes in Russian psychology, including volumes in personality, perception, and cognition.

UZNADZE spent thirty years of his life investigating the phenomenon of set. His efforts were devoted to the identification of the major parameters of set as a concept in the theory of general psychology, with a view to elucidating its unitary nature. Set, according to Uznadze, is an integral state of readiness of the organism that is the precursor of all activity.

Uznadze completed his doctoral thesis in Leipzig, working under Barth and Wünder. It was here that Uznadze became interested in the Fechner and Charpentier illusions. In these experi-

ments, the presentation of unequal magnitudes induces an illusory perception of inequality when equal magnitudes are presented. Both Fechner and Charpentier gave explanations for this phenomenon. Uznadze disagreed with the explanations Fechner and Charpentier gave for this phenomenon and devised an experimental methodology that produced results that neither the Fechner nor the Charpentier hypothesis could incorporate.

The second influence upon Uznadze came from the Würzburg school. One of the major ideas of this group was that a conscious *Aufgabe* or task-orientation establishes in the individual an unconscious set, determining tendency, or *Einstellung*.

Uznadze combined the ideas of Charpentier and Ach in formulating his own distinctive theory of set. Uznadze claimed that the Charpentier illusions are concomitantly determined by an "intermediate organization of experience" extending to all sensory modalities. Consequently, this theory might account for the polymorphous description of set that is typically found in contemporary Western psychological literature.

It is set as a pre-orientation to respond in a determined manner that is the general, constitutive factor of the intermediate organization of experience and of the inner organization of the individual. Illusions occur when there is a conflict between the presently active set and the stimulus situation.

In order to understand the theory of set, it is necessary to know the research methodology upon which the theory was formulated. Briefly, the basic method involves the following. The subject is asked to solve some task. This is presumed to evoke a need in the subject. Subsequently, unequal spheres are presented haptically, say, for five trials. On the next trial equal spheres are presented. Most subjects appraise one of the equal spheres as either 'larger' or 'smaller' than the other. The resulting illusion is considered to be a concomitant of a specific state, a fixated set that has been created in the individual. This basic method allows one to study the psychological content of the interaction of the two determinants of behavior, a need and a situation for gratification of the need. Consequently, set, *per se*, is not exhaustively describable in purely physiological terms.

It is on the basis of this simple methodology that the whole of the theory of set has been formulated. It is, however, a grand leap of faith from these data to a theory that attempts to comprehend all human activity. Two of the main planks that Uznadze uses to build his conceptual citadel of the unitary and pre-determining nature of set lie in the fact that a set fixated in one sensory modality is transferred to other modalities. The other compelling data are derived from the fact that the same illusions are obtained when the unequal spheres are presented to the subject while under hypnosis.

Further experimentation has revealed the following dimensions of set: rate of excitation (formation of set), degree of differentiation, dynamicity, plasticity, stability, generalizability, and cross-modality transfer. The experimentation has included most of the sensory modalities and has investigated both quantitative and qualitative relationships. To date, several volumes of set research have been published, including studies in social psychology, perception, and personality.

The results of research work enable formulation of some of the basic propositions constituting the theory of set as

a theory in general psychology. Set is an integrated personality mode of the actor at each discrete moment of his activity; representing as it does the highest organization level, it brings into focus all those inner dynamic relations that mediate in the individual the psychological effect of stimuli acting upon him. Finally, as a process that brings into balance the relationships obtaining at the moment between the individual and his environment, set provides the basis for the emergence of definitely oriented activity, such as perception, speech, and memory.

ALTHOUGH no attempt has been made to integrate Uznadze's concept of set with Western descriptions, there are some points of similarity. In his comprehensive model of behavior Uznadze stresses the unitary nature of set as a basic proposition. It is this mechanism that provides the inner cohesion, consistency of behavior, and the structural stability of the individual's activity. The polymorphous description of set in Western literature, which has caused psychologists to set this problem aside in despair of solution, is not necessarily irreconcilable with Uznadze's theory. This theory may provide a positive foundation for the re-examination of this ubiquitous, and recalcitrant phenomenon. This, however, awaits empirical investigation. We might finally have a model capable of integrating the contradictory evidence in this area.

Uznadze also stresses the central nature of set. In this F. H. Allport (1955) agrees. His theory also agrees with some of Allport's other conclusions, namely, the importance of set in activity, set as a readiness for and sustainer of activity, the hierarchical nature of sets, and the interference of or facilitation by one set on another.

The third major characteristic of set is its dynamic nature. Set is an active, causal factor in behavior. Consequently, Uznadze's theory is in disagreement with Luchin's idea of set as a habituation or mechanization of mind and Helson's concept of adaptation. Adaptation level is a passive phenomenon; set deter-

mines the direction of activity and of the process of consciousness and gives expression to the "purposeful meaning" of the situation.

In summary, set has the following characteristics: set is a psychological phenomenon *sui generis*; it forms the basis for the emergence of consciousness; and it is the dynamic structural unit of the integral personality into which all activity of the organism is incorporated.

Uznadze's set theory attempts a comprehensive explanation of all human activity. Its brilliance and uniqueness provide a new perspective for many old problems; its validity is an empirical question.

All the World's a Stage

Bruce J. Biddle and Edwin J. Thomas (Eds.)

Role Theory: Concepts and Research. New York: Wiley, 1966. Pp. xiv + 453.

Reviewed by VERNON L. ALLEN

Both editors, Bruce J. Biddle and Edwin J. Thomas, are social psychologists and earned PhD's under the direction of Theodore Newcomb at the University of Michigan. Biddle is now Associate Professor of Psychology and Sociology, The University of Missouri. Thomas is Professor of Social Work and of Psychology at The University of Michigan. Biddle is co-editor of *Contemporary Research on Teacher Effectiveness* and of *The New Media and Education: Their Impact on Society*. Thomas is co-author of *In-Service Training and Reduced Work-leads: Experiments in a State Welfare Program*.

Vernon L. Allen, the reviewer, is As-

sociate Professor in the Department of Psychology, University of Wisconsin, Madison. His PhD in social psychology is from The University of California, Berkeley. He did an NIMH postdoctoral year with Festinger at Stanford and has been at Wisconsin since 1963. He is currently editing a book on Psychological Factors in Poverty and will spend next year in England on a Fulbright fellowship.

CONSIDER a theory that deals with a complex on-going social behavior, that provides a conceptual structure bridging disciplines, and that appears congruent with everyday observation and common sense. It would be surprising if such a theory did not hold a special allure for social scientists. And many have been attracted to the broad body of interrelated concepts known as role theory. Ironically, one of the virtues of role theory has also been a source of difficulty for the serious student: much of the relevant theoretical and empirical work is widely scattered across several disciplines.

The editors of this book have endeavored to ease the scholar's burden. In this volume is a judicious collection of articles on role theory, and a sizable original section (60 pages) by the editors that serves nicely as an introduction and accompanying text for the readings.

One cannot quibble with the editors' selection of readings; while recent articles as well as some classics are included, older papers extremely well-known and easily available are not; articles are often wisely abridged rather than rigidly reprinted in their entirety regardless of appropriateness; the 47 papers are well balanced between the theoretical (about 65%) and the empirical (about 35%); and the wide range of contributors—psychologists, sociologists, anthropologists, and psychiatrists—accurately reflects the multi-disciplinary impact of role theory.

THE FOUR sections written by the editors consist of a useful chapter on the historical background of role theory, followed by three chapters analyzing the conceptual basis and structure of

the theory. These four sections constitute a considerable original contribution—a great deal more than is usually provided in the perfunctory introduction to an edited volume of previously published papers.

In the first conceptual chapter dealing with "basic concepts for classifying the phenomena of role" the authors make clear their dissatisfaction with the terminological and definitional impreciseness of role concepts and the lack of agreement among experts in the field, then embark upon an attempt to ameliorate the situation. The chapter is an admirable effort but is unlikely to be of great benefit to the reader—whether sophisticated or naive in the field—because of the high level of abstractness at which the analysis is conducted. The chapter sometimes fluctuates between the abstruse and the obvious: the term individual is "... a concept that involves an analytic partitioning of the phenomenal referent, person . . ." (p. 23). The language in this and the other two chapters on the conceptual basis of role theory is likely to appear obscurantist to the average reader. But it is clear that the authors are trying to make explicit unexamined assumptions, surplus meanings, and circularity involved in the many overlapping and ambiguous terms employed in this field.

Many will argue for the advisability (particularly in the case of role theory) of reaching general agreement on definitions and language usage in a theory. Yet it is unlikely that such a goal can be accomplished quickly or by fiat, and in fact consensus may sometimes prematurely constrict, and thus retard, the further development of a theoretical system. Though the precise definition of all possible terms of a theory may be of some value, we must remember with Haeckel that preciseness is not sufficient for truth. For those who do feel the need for order the editors have provided a table of three and one-half pages containing their definitions of 44 concepts used in role theory.

The other two chapters on the properties and variables of role phenomena present somewhat smoother linguistic sailing than the first conceptual chapter. The chapter on variables could cer-

tainly be read profitably without having read the previous two chapters.

Finally, appreciation must be expressed to the editors for providing an extensive, though incomplete, bibliography of articles dealing with role theory. The usefulness of a bibliography of over 1,400 entries forces one to forgive the compilers for erroneously including several articles totally irrelevant to role theory.

The editors are very sanguine in their forecast for the future of role theory, foreseeing an entire new area of "role analysis." And future activity in role theory is likely to be enhanced by the appearance of this book. It will probably find classroom use in psychology and in other social sciences, thus exposing future researchers to ideas of role theory as fascinating to social scientists today as to Shakespeare, when he too observed that "All the world's a stage, / And all the men and women merely players. . . ."



If geometry were as much opposed to our passions and present interests as is ethics, we should contest it and violate it but little less, notwithstanding all the demonstrations of Euclid and of Archimedes, which you would call dreams and believe full of paralogisms; and Joseph Scaliger, Hobbes, and others, who have written against Euclid and Archimedes, would not find themselves in such a small company as at present.

—GOTTFRIED WILHELM VON LEIBNIZ



New Series by Seasoned Psychologists

Kenneth W. Spence and Janet Taylor Spence (Eds.)

The Psychology of Learning and Motivation: Advances in Research and Theory. Vol. 1. New York/London: Academic Press, 1967. Pp. x + 381. \$11.50.

Reviewed by W. K. ESTES

The editors of the first volume of this new series, the late Kenneth W. Spence and his wife, Janet Taylor Spence, are too well known to the world of psychology to need any further introduction here. A recent note is that Janet Taylor Spence has recently become Chairman of the Department of Psychology at The University of Texas at Austin.

The reviewer, W. K. Estes, for many years Professor of Psychology at Stanford University, is equally well known. He is now Professor, The Rockefeller University.

THIS VOLUME is the first of a new series that presents systematic integrations of research data on specialized topics, generally oriented around the evaluation and development of some theory. Since the initiation of this series must be the last of Kenneth Spence's many contributions to the advancement of scientific communication in psychology, it is pleasant to note that the new opportunities afforded by this type of publication appear likely to be of considerable aid to the behavioral theorist, whose investigations often cannot be readily appreciated or even understood apart from their roles in a long-term plan.

Now, what are some of the specific scientific advances represented in the

present volume? This question is hardest to answer in the case of the first article, by Abram Amsel. The problem at issue is clear enough. In the extensive literature concerning effects of intermittent reward and extinction, studies involving comparisons between groups of subjects almost universally show greater resistance to extinction following intermittent as opposed to consistent reward. However, when a similar comparison is made between the performances of the same individual on two different tasks, the usual difference fails to appear. Amsel marshals the evidence on this and closely related problems, including unpublished studies from his own laboratory, and indicates his expectation that all will yield to an attack based on his frustration theory. Perhaps so. What is more impressive to an outsider is the fact that the differences in findings between the two classes of experiments, though not surprising in retrospect, were not predicted in advance from any extant theory of reward. The moral may be that none of our present theories are as good as they look when limited to familiar and well-worked terrain.

IN a longer and wider ranging article, E. J. Capaldi approaches the same general class of phenomena with a different

theoretical motif. Capaldi's proposal is that a wide variety of findings having to do with partial reinforcement, successive acquisitions, and extinctions, and effects of trial spacing can all be interpreted by means of what he terms the "sequential hypothesis."

At first acquaintance, this hypothesis, stating that performance on any trial is affected by stimuli from earlier trials of the experiment, seems rather old hat. However, Capaldi's conception of the process involved is rather different from that of Hull, Sheffield, and others who have attempted to account for partial reinforcement effects on the basis of stimulus traces carrying over from one trial to the next. In Hull's theory, the stimulus trace is an immediate consequence of stimulation and dies out rapidly as a function of time. In Capaldi's formulation, the stimulus trace does not die out over time, it simply changes. Thus any condition of reward or nonreward that concludes one trial of an experiment generates a specific stimulus trace at any given later time, the generalization among such traces has similar properties to generalization along a stimulus dimension such as brightness. Although, taken literally, this notion is surely not entirely correct, it proves quite fruitful and gains considerable support from some experiments in which intervals between rewarded and unrewarded trials are manipulated. The reader is left at the end of the series wishing for a third article that might bring together the well insulated contributions of Amsel and Capaldi, whose very different schemes for interpreting the same phenomena pass each other like ships in the night.

A "new look" in drive theory, proposed by Harry Fowler, would have both performance and reinforcement depend on the duration of action of a given drive as well as on its intensity, reinforcement being a consequence of reduction in either intensity or duration. Just how reductions in duration can be achieved independently of reductions in intensity remains a bit of a puzzle for this reader.

A quite unrelated suggestion for "new looks" is that readers of future volumes might well be willing to pay for a few additional pages in order to avoid the misery of grappling with a barrage of new abbreviations. It is all very well to save space (*S*) by judicious use (*U*) of abbreviations (*A*) for technical words

(*T*) when the *T* are in wide *U* and the *A* are familiar. But the density of *A* in some chapters of the present volume (*V*) is unaesthetic at best. Some *S* is saved only at the cost (*C*) of extra drudgery (*D*), not to speak of annoyance (*A_y*), on the part of the reader (*R*), who becomes homesick for articles written in nice, old-fashioned WORDS.

IN the last two chapters, we leave the microcosm of the rat in the runway and find a smart change of pace in Gordon Bower's essay concerning a multicomponent representation of the memory trace in human learning, and George Mandler's effort toward organizing the evidence on organization in free recall.

The starting point for Bower's presentation is the notion, currently popular in many quarters, that what an individual stores in memory following a learning experience is not a unitary association, or even a bundle of such associations, but rather a coded representation of the stimulus-response relationships. What is new here is a characterization of coding that is reasonably specific, that gives one some idea as to why coding is valuable to the learner, and that connects this concept with contemporary work on pattern recognition. In brief, an individual's memory for a stimulus is assumed to be not an image of the original stimulus, nor a label for it, but rather a characterization in terms of the appropriate values of each of a set of attributes. A simple model embodying the multicomponent trace assumption provides an excellent account of recall as a function of number of intervening items in a novel experimental arrangement and leads to the tentative conclusion that components of the memory trace are lost on an all-or-none basis when forgetting occurs. In the remainder of this essay, the notion of the multicomponent trace is combined with auxiliary assumptions and applied to various problems on recognition memory and recall performance. The reader well versed in signal detectability and mathematical learning theories is able to share with Bower in the enjoyable pastime of working out some implications of a new idea.

Mandler takes as his starting point George Miller's "unitization" hypothesis. The interpretation of the hypothesis proposed for free recall is that in remembering a list of items, an individual can only retain about seven independent items, but can retain a much larger quantity of information than apparently permitted by this limitation if each item in turn comprises a subgroup of items interrelated either by previous learning or logical relationships. On the basis of researches by Cohen, Cofer, and Bousfield, in addition to a series of his own studies, Mandler concludes that even in unstructured situations, subjects find their own ways of categorizing materials and extend their recall capacity by organizing items into hierarchies of higher and lower order categories.

It is not clear whether this organizing tendency is thought to be a consequence of basic learning mechanisms or a type of strategy that college students tend to acquire in the course of their education. To the extent that students do not automatically organize material for recall in hierarchical fashion, they should certainly be trained to do so, for the advantages of such a system are readily apparent to anyone who has had occasion, say, to look for a particular item in a well-run library as opposed to a second-hand bookstore.

At another level, the volume under review represents an attempt to fill in a missing stratum in the hierarchical organization of research reports in psychology. Since the flood of information in the vast input of individual articles is all but irretrievable, the corporate organism responds by generating new levels of organization. For each *N* research papers, a super-article ("advance"); for each *N* super-articles, a book; for each *N* books, a handbook; for each *N* handbooks. . . . One wonders whether there is evolving, in parallel, a new breed of super-psychologists, who will be able to cope with these paper pyramids.



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Orthodoxy and Enthusiasm: A Reconciliation

Ralph R. Greenson

The Technique and Practice of Psychoanalysis. Vol. I. New York: International Universities Press, 1967. Pp. xv + 452. \$12.50.

Reviewed by JOSEPH ADELSON

The author, Ralph Greenson, is Clinical Professor of Psychiatry at UCLA School of Medicine, and a Training Analyst at the Los Angeles Institute for Psychoanalysis. He was Dean of the Training School from 1957 to 1961, and President of the Los Angeles Psychoanalytic Society from 1951 to 1953. He has published some twenty-five papers on various aspects of psychoanalysis.

*Joseph Adelson, the reviewer, is Professor of Psychology at The University of Michigan. He is Assistant Director of its Psychological Clinic and from 1961 to 1964 was Coordinator of the Graduate Training Program in Clinical Psychology. He is a co-author of the recent *The Adolescent Experience* and is currently studying the growth of political thought in adolescence.*

IT was David Hume, I recently learned, who said that the corruptions of Christianity were Superstition and Enthusiasm. The first of these is High Church, where doctrine proceeds to dogma and then hardens to superstition. The second of these is Low Church, where doctrine evaporates in an excess of spirit. These tendencies have always been visible in psychotherapy, and never more so than today. The Low Church sects multiply, especially in California. They flee doctrine to stress the dramatization of the self; anything goes so long as the heart is pure, and

if the heart is pure anything goes. Meanwhile (or therefore) the High Church hardens, and hypothesis moves to precept and on to ritual.

Psychoanalysis is without question the Highest of our therapeutic churches. No other school of psychotherapy possesses so extensive and so codified a body of doctrine; and yet from its beginnings, from Ferenczi on, it has had to cope with—and quell—outbreaks of the enthusiast mood. Much of its literature on technique addresses itself, tacitly or otherwise, to this conflict.

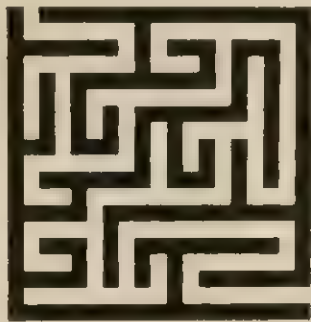
Greenson's book seems to announce itself on the side of orthodoxy. It is clearly meant to be canonical. Its second sentence warns of the dangers of "ambiguities, divergencies and deviations" going unrecognized and passing for doctrine. One fears the worst: it is only one short step from the definitive to the dogmatic. Matters are not much improved by the author's occasional fondness for such *ex cathedra* pronouncements as "It is only in psychoanalysis that the therapist seeks to uncover the cause, purpose, mode, and history of the resistances," or "(Interpretation) is the procedure which distinguishes psychoanalysis from all other psychotherapies because in psychoanalysis interpretation is the ultimate and decisive instrument."

As things turn out, that is the worst. These pieties are only occasional, and once we are past them, once we come

to the substance of the book, we find ourselves held by a masterful performance. This is a splendid book, unquestionably the best we have had on psychoanalytic technique, and unlikely soon to be surpassed or superseded. No doubt it is hackneyed to say that a book represents the distillation of a lifetime's experience and reflection, yet here one must say it, for this is precisely the sense we have in reading this book, that its authority grows out of a deep and hard-won knowledge.

IN THIS, the first of what will (apparently) be two volumes, Greenson concentrates on the themes of resistance and transference. He says, and quite correctly, I feel, that "it is impossible to talk intelligibly in depth and in detail about any technical problem" without an adequate understanding of these topics. The treatment of these problems is clearer and more complete than any I have seen. In the chapter on resistance (over ninety pages long) he begins with a working definition of the phenomenon, then describes its clinical appearance, the many ways, some of them extremely subtle, in which resistance can make itself felt in the analytic encounter. There follows an historical survey of the concept, and then an excellent discussion of the theory of resistance. Resistances are then classified by type. It is only after this grounding in the theory, history, clinical description, and nosology of resistances that Greenson discusses technique proper, how it is recognized, demonstrated to the patient, clarified, and finally interpreted. The same thoroughness, the same careful organization is found in an even fuller chapter (over 200 pages long) on the problems of the transference. The book closes with a sensitive discussion of the psychoanalytic situation, focusing upon the personal qualities that both patient and therapist must bring to the analysis.

This gloss may give the reader some idea of the order and care with which the themes of the book are pursued; but its merits go far beyond the merely compulsive. It is well written, and free of the jargon and otiosity which mark so much of contemporary psychoanalytic writing. Clinical examples are given in



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abundance. These are germane and at times remarkably candid. Greenson does not hesitate to cite instances of his own errors; he is also frank about his personal traits and the ways these influence his therapeutic work.

IN a book of such excellence, it is hard to choose a high point, but I would nominate the discussion of the "working alliance," a topic to which Greenson has made important original contributions. In some analyses, therapist and patient do not establish a sense of rapport or partnership, do not develop a community of goals. They may go through the motions, follow the standard psychoanalytic scenario, accumulate "insights"—but to little therapeutic effect. Some of the time the problem stems from the patient's inability to take the analytic role, to bring to the situation a "reasonable ego." And some of the time—I would guess most of the time—these impasses grow out of the analyst's failure to provide an appropriate emotional climate. Some analyses have all the ambience of a late Ingmar Bergman movie: coldness and silence. Indeed, Bergman's extraordinary film *Persona* can be read, *inter alia*, as a paradigm of a certain sort of analytic relationship.

In his discussion of the working alliance, Greenson continually returns to the need to safeguard the patient's self-esteem and dignity. One might imagine this to be a matter hardly needing emphasis; but for a variety of reasons, doctrinal and existential, psychoanalytic therapy is characterized by a sometimes critical asymmetry of power between practitioner and client. This is due, in some degree, to the inevitable infantilization induced by regressive transference reactions. In some part it stems from the common misunderstanding of certain technical formulae proposed by Freud—especially the abstinence rule, and the analyst-as-mirror doctrine. But beyond these there is, I feel, an intrinsic austerity in the psychoanalytic method. It sets itself against the excesses of enthusiasm, against gratification too quickly claimed, against revelation too cheaply earned. A balance between compassion and austerity is at the heart of

the method, and when the balance is uneven, when austerity stifles compassion, the mood of the relationship can become authoritarian, needlessly frustrating, demeaning to the patient. Perhaps more often, the therapy limps along in tedium and indifference.

These impasses result in the notorious interminable analyses, or in the increasingly common second (and third!) analyses. How can they be avoided? Greenson's discussion is too complex to be easily summarized, but fundamentally he lays stress on the dangers ensuing from Superstition—a simple-minded, single-minded following of the "rules," which shows itself in stereotyped interpretations, a retreat behind the analytic mask, routinized detachment. As a cure for these tendencies, he emphasizes the need to protect the patient's rights, to establish an atmosphere marked by spontaneity, warmth, and mutual respect—in short, Greenson aims to reclaim for psychoanalysis the virtues of Enthusiasm. That is what makes the book, in the end, so surprising and so winning. Greenson resists his own inclination towards the orthodox; High Church reaches out to Low Church.

Revolutionaries in the Making

E. Victor Wolfenstein

The Revolutionary Personality: Lenin, Trotsky, Gandhi. Princeton, New Jersey: Princeton University Press, 1967. Pp. x + 330. \$7.50.

Reviewed by BARRY McLAUGHLIN

E. Victor Wolfenstein is Assistant Professor in Political Science at the University of California at Los Angeles. After an undergraduate career at Columbia, he moved on to Princeton

where he worked at the Center for International Studies. He attributes his interest in psychoanalytic theory to the influence of his aunt, Martha Wolfenstein, who is Associate Professor of Child Psychiatry at Albert Einstein College of Medicine.

The reviewer, Barry McLoughlin, received his PhD from the Department of Social Relations at Harvard where he studied with Erik Erikson, among others. He is now at the University of California at Santa Cruz where his interests range from the experimental investigation of incidental social learning to the vicissitudes of social movements and their membership. He is editing a book, *Studies in Social Movements, on the social psychology of social movements*.

IT has been over 35 years since Harold Lasswell wrote *Psychopathology and Politics*. On the basis of case studies of political activists he argued in psychoanalytic terms that the motivations of political men develop out of their prepolitical lives. Now another political scientist has given the Lasswell thesis more modern trappings in his discussion of three revolutionists, Lenin, Trotsky, and Gandhi. Through the study of their lives Wolfenstein seeks to determine whether there are common psychological experiences that affect the personalities of revolutionists.

This is a tricky business. For one thing there are as many types of revolutionists as there are revolutions. Wolfenstein, however, is modest in his ambitions. His hypotheses are tentative; he is merely adding three more to the approximately 20 case studies Lasswell reported. He admits there are considerable variations in personality, but hopes that comparative analysis will lead to a model of the psychological roots of revolutionary involvement and leadership.

For psychological read psychoanalytic, since Wolfenstein leans heavily on contemporary psychoanalytic theory, especially the work of Erik Erikson. He charts the lives of the three men he studies through the eight stages of psychosocial development, from trust vs. mistrust to integrity vs. despair. The book reads well and Wolfenstein's clinical

cal interpretations are judicious. It all boils down to whether or not one goes in for this sort of thing.

In explaining Lenin's basically mistrustful nature, for example, the author makes a great deal of the fact (?) that Lenin did not walk until he was three. This is seen to indicate a highly cautious attitude and to foreshadow the almost paranoid suspiciousness that characterized Lenin's adulthood. An interesting hypothesis, and the author introduces it as such. But somewhere along the way the author shifts from speculative to factual language. After the pieces of sometimes questionable biographical information have been patched together and interpreted, we are suddenly given the clinical picture of Lenin's personality: unsuccessful resolution at the oral phase resulting in basic mistrust, a firm sense of autonomy developed during the anal phase, Oedipal guilt and ambivalence, and so on. Each part of the picture has been assembled tentatively and carefully, but the finished product is thrust before us with the dogmatic insistence often characteristic of psychoanalytic writing.

BUT there is more involved here than one's taste for psychoanalytic interpretation. Even accepting the validity of a psychoanalytic approach, one feels uneasy about the author's explanation of revolutionary personality. For each of the three men studied the Oedipal situation is seen as critical. Wolfenstein argues that Lenin, Trotsky, and Gandhi all had unusually ambivalent relations with their fathers. Yet the author admits that this kind of ambivalence is far from uncommon. It is transformed into revolutionary activity because it is accentuated as adolescence progresses. In Trotsky's case, for instance, there was an increasing alienation from parental authority as a result of a rather sharp break with his family after high school. But this is not uncommon either. So the author must add that a certain political context is necessary for revolutionary activity. Now we have it. Given the combination—unresolved Oedipal conflicts and a suitable political climate—a revolutionary personality emerges.

But even this combination is not

uncommon. Other men have lived through similar personal experiences during the same historical periods but have not become revolutionary leaders. Somehow the stuff of greatness remains to be explained. Accentuated Oedipal conflicts are not enough. Wolfenstein's

work is weakest where psychoanalytic theory is weakest, in explaining the origins of ego strength. Until the theory can tell us something more about the sources of strength, we really do not learn from it a great deal about men of genius.

Pavlov to Teplov to Gray

J. A. Gray (Compiled, edited and translated by), with an editorial introduction by H. J. Eysenck

Pavlov's Typology: Recent Theoretical and Experimental Developments from the Laboratory of B. M. Teplov. New York: Pergamon, 1964. Pp. xv + 480. \$12.00.

Reviewed by W. J. BROGDEN and RICHARD LYNN

In the course of the preparation of this book, published as Volume 1 in the *International Series of Monographs on Experimental Psychology*, the editor, J. A. Gray, performed the triple function of compiler, editor, and translator. He graduated at Oxford in Modern Languages, was a student of Eysenck's at the University of London and was on the staff at the Institute of Psychiatry before going to Oxford where he is now Lecturer in Psychology.

W. J. Brogden, the first reviewer, is Professor of Psychology at the University of Wisconsin, Madison. He received his PhD from the University of Illinois and worked as a post-doctoral fellow with Gantt at Johns Hopkins. His research since 1933 has been mostly in animal conditioning. The second reviewer, Richard Lynn, is now Professor of Psychology at The Economic and Social Research Institute, Dublin. He is a Cambridge graduate, interested in personality, physiological psychology, and Russian psychology. He formerly was a member of the Department of Psychology, University of Exeter. He is

author of *Arousal, Attention, and the Orientation Reflex*. (See page 462).

Reviewed by W. J. BROGDEN

GRAY shows great versatility. He is the translator of Teplov's paper on the history of Pavlov's theoretical development of typological differences in the dog. This forms Part I of the book and consists of 154 pages. Gray is the author of Part II (210 pages) which consists of two sections. The first section is a review of research work done in Teplov's laboratory (Institute of Psychology, Academy of Pedagogical Sciences and University of Moscow) that is concerned with typological differences in man based upon Pavlov's methods and theory, and Teplov's modifications of them. In this section, Gray demonstrates his ability to describe, organize, evaluate, and criticize the work of Teplov's laboratory for the benefit of those who read English but not Russian. The second section shows his creativity by integrating Teplov's experi-

mental findings with Western research on the reticular activating system and levels of arousal to provide an alternate theoretical interpretation to the Pavlovian theory of strength of the nervous system. Theoretical developments thus go from Pavlov to Teplov to Gray.

Part III of the book (98 pages) consists of English translations by Gray of five articles previously published by investigators working in Teplov's laboratory on experiments concerned with the dimension of strength of the nervous system in man. All of these articles have been discussed in considerable detail by Gray in the first section of Part II and their publication in Part III is superfluous. The only possible gain to the reader is complete access to some of the original Soviet literature and the opportunity to evaluate Russian scientific procedures and reporting.

IN his historical survey of Pavlov's theoretical development concerning types of higher nervous activity, Teplov makes considerable use of the stenographic typescripts of Pavlov's staff conferences. These are briefly referred to as "Pavlov's Wednesday's" (conferences of Pavlov's laboratory staff, published in 1949) and "Pavlov's Clinical Wednesdays" (meetings held in the various nervous and psychiatric clinics, published in 1954). These sources show that Pavlov frequently revised his classification system while preserving the same names for different types, that he considered both innate and environmental factors to be determiners of type, that different methods were used at different times for determining strength of the nervous system, and that even after the publication of his last work on classification of types, he continued to raise questions and consider revision of the theory.

Pavlov often remarked at the "Wednesday" gatherings that the study of types of higher nervous activity in man must develop adequate methods for its purpose and that the automatic transfer of research methods used with animals to studies of man is not only useless, but also impossible. Teplov and his colleagues have followed this advice. They have developed new techniques to test hypotheses derived from Pavlov's the-

ory applied to man and in so doing have modified the theory. Pavlov's theory of types is based on variation in the dimensions of strength, mobility, and equilibrium of the two opposing nervous processes of excitation and inhibition. Strength of the nervous system is derived from these measures. Teplov and his colleagues have been primarily concerned with variation in the strength of excitatory nervous processes, measures of which determine the strength of the nervous system that is considered to be a dimension of personality in man. However, there is an inverse relation between measures of strength of excitatory nervous processes and weakness or strength of the nervous systems as a typological characteristic of the individual human being. Under most conditions, it is the weak nervous system that responds to a given stimulus with the most intense excitatory process whereas the strong nervous system responds to the same stimulus conditions with a less intense excitatory process. All of the methods used in Teplov's laboratory are used with and without the administration of caffeine to the subjects, on the assumption that caffeine has a greater effect upon individuals with weak nervous systems than those with strong nervous systems. The experimental designs suffer from the fact that in all cases the order of testing is from the without caffeine condition to the caffeine condition and that there are no placebo controls. Most of the methods have been given formal names and are concerned with changes in visual and auditory thresholds, intersensory effects, fatigue of motor responses, differences in reaction time, differences in orienting reflexes, distraction tests, and the like. Subjects are divided into strong or weak types (of nervous systems) on the basis of measures from these tests. Gray has applied statistical tests to the differences in those cases where the published data made it possible and reports satisfactory confidence levels for rejecting the null hypothesis in many cases. He interprets a factor analysis of the Teplov tests as a demonstration of continuous variation in measurement of the strength of the nervous system.

Having accepted reliable differences in measurement of strength of the nervous system to the extent at least of distinguishing between strong and weak types, Gray attempts reinterpretation of the Teplov data in terms of arousability of the nervous system. The hypothesis that accounts for differences between weak and strong nervous systems is as follows. The weaker the nervous system, the more pronounced are both the activating effects mediated by the brainstem reticular formation and the inhibitory influences which, under certain conditions, descend from the cortex to the reticular formation. These two effects, one activating and the other inhibitory, are linked together by a feedback loop. This accounts both for the greater excitability of the weak nervous system and its greater tendency to sleep as a result of monotonous stimulation. Teplov's theory accounts for the greater excitability, but not for the effects of the monotonous stimulation.

Gray does not consider his theoretical interpretation to be a rival for Teplov's theory, but to be a reinterpretation that makes use of research and theory from the Western world. It is his hope that this book will stimulate interaction in research and theory between Western and Soviet work in this field. If this occurs, the book will have served a very useful purpose.

Reviewed by RICHARD LYNN

THIS is a book for arousal theorists. No one should be put off by the title, which may suggest that the reader is going to be given accounts of melancholic, sanguine, choleric, and phlegmatic dogs, so classified according to obscure criteria. It is in fact an account of a series of experiments on human subjects that has been carried out over the last decade in Moscow under the direction of Teplov. To the Western reader, these experiments are exceedingly novel and startling and should not be missed by anyone interested in arousal.

The book is divided into three sections. The first consists of a translation

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of an article by Teplov in which he gives an historical account of Pavlov's typological system, concluding with a review of recent work in his own laboratories. He and his associates have been concerned principally with the concept of "the strength of the nervous system" and have devised some dozen measures of this. These are mainly measures of thresholds, sensitivity to drugs, and to fatigue. The flavor of the Russian work can be given by considering one example, the conditioned photochemical reaction. The subject is first dark adapted and his absolute visual threshold measured; a flash of light is then presented, which has the effect of lowering the subject's sensitivity; this lowering of sensitivity is conditioned by presenting a neutral stimulus before the flash, but with continued reinforced trials the conditioned stimulus has less and less effect. Individuals with weak nervous systems show this effect more markedly, since they are more prone to generate protective inhibition. These individuals also have low absolute thresholds, show a rise in threshold when a distracting stimulus of different modality is presented ("strong" subjects show a fall in threshold), and are more susceptible to the effects of caffeine.

IN the book's second section the author himself reviews the experiments on the strength of the nervous system and suggests that the concept is essentially the same as the Western concept of arousal, "weak" individuals being those who have a high level of arousal or easily mobilized arousal. There are many similarities between the two ideas and it is here that arousal theorists should get a great deal out of the book.

The final section gives translations of five experimental papers by members of Teplov's team and provides more detail on some of the experimental procedures. Innocence of statistics is a fairly prominent feature of the reports, but on the other hand the relationships between the different measures of strength are striking and well deserve the attention of Western investigators.

The author has achieved a high level of accuracy and clarity in the translation. It is a surprise that so much sense

can be got from the Russian work when it is presented by a psychologist who evidently understands what he is writing about.

OR'S to the OR

R. Lynn

Attention, Arousal and the Orientation Reaction. (International Series of Monographs in Experimental Psychology. Vol. 3.) New York: Pergamon, 1966. Pp. viii + 118. \$5.50.

Reviewed by DAVID G. McDONALD

The author, Richard Lynn, is identified on page 459 of this issue.

The reviewer, David G. McDonald, is Associate Professor of Medical Psychology, Department of Psychiatry, University of Missouri Medical Center. His research interests have been for some time in the general area of psychophysiology, and, more recently, the psychophysiology of sleep in particular. It has included several studies of the orientation response, in both sleep and wakefulness.

ONE sometimes gets the impression that all good and enduring things in psychology can somehow be traced to either Freud or Pavlov. Whether or not this bothersome thought has any merit, the present volume is certainly an excellent example of a very current topic with just such historical roots. In this case, Lynn has provided us with a reasonably up to date account of an old Pavlovian phenomenon, the orientation reaction (OR). This is the response that Pavlov originally termed the investigatory or "what is it?" reflex to a novel stimulus, but which is now most frequently referred to as the orienting response in Western journals.

After paying proper tribute to Pavlov's contribution, Lynn quickly moves on to the more current work, most notably that reported by the Russian scientist, Sokolov. There is a relatively complete presentation of the physiological components of the OR, as well as the stimulus conditions which produce the response. Following this there is a creditable discussion of the phenomenon of habituation of the OR, and the neurological models which have been formulated to account for this habituation. The remainder of the book is devoted to discussions of the role of the OR in classical conditioning, development, and individual differences.

This is a tight, concise book: eminently readable, logically and intelligently organized, and in many instances admirably researched. While there is no preface or introduction written by the author, the book is billed in a foreword by Hans Eysenck as being of value through the fact that it draws on many Russian sources unavailable in the West, and also that it brings together a number of sources for the first time in one volume. In the opinion of this reviewer, this last point most accurately pinpoints the real merit of the book. This is especially true in the chapters covering habituation of the OR and the neurological models of habituation. Here Lynn deserves full credit for presenting a truly scholarly critique of these topics. For example, numerous investigators seem to have fallen into the habit of thinking only of Sokolov in dealing with the topic of neurological models. And yet Lynn gives a critical presentation of no less than nine models, beginning with Pavlov, running through Sokolov and Jouvett, and ending up with Hernandez-Péon, all of whose work is necessary for a genuine appreciation of the complexities involved in this topic.

UNFORTUNATELY, the remaining sections seem a bit pale by comparison. The notion that the OR may be related to or used as a measure of attention and arousal is indeed an intriguing and reasonable one. Moreover, research that has appeared in this country since the publication of the book does in fact lend solid support to this thinking.

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The senior editor, who is also the principal author of this book, sets the theme: exploration of the goal aspects of motivation. The theme is taken up by the other authors who investigate the several co-determinants of goal setting—structural, genetic, dynamic environmental, socio-cultural, integrative—and who either share Dr. Bühler's humanistic perspective or relate it to alternate theoretical views.

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By and large, however, the kinds of data that were available when the book was written are more of what could be called initial or tentative reports. It is interesting to note further that the primary sources of these chapters are virtually 100 per cent from the Russian literature with only a few exceptions; this is somewhat frustrating, since it contrasts sharply with the broader documentation of the earlier chapters, and also ignores a wealth of data extant in this country. For example, the role of the OR in classical conditioning has received a great deal of attention in the West, and this work is not mentioned at all. Perhaps then the major contribution of these later chapters is that they call 'attention to attention.' To his credit, it should be pointed out that the author generally emphasizes hypotheses in terms which appear to be empirically testable; further, he writes in a style which seems to push and goad the reader, to try to generate a spark of enthusiasm, and to create an interest in furthering the research. This I heartily endorse!

The book may be misnamed, since it is a presentation primarily focused on the OR, and only secondarily is it related to other concepts. Nevertheless, it is a valuable contribution. It should be read by most graduate students, as well as by all investigators whose research may have some relationship, however distant, to the phenomena of the OR.



Granted that all scientific description is based upon abstractions and generalizations, the latter must nevertheless be derived from observed events. Above all, the descriptions should not be confused with the phenomena described.

—KANTOR



Coming of Age in Psychotherapy

Charles B. Truax and Robert R. Carkhuff

Toward Effective Counseling and Psychotherapy: Training and Practice. Chicago: Aldine, 1967. Pp. xiv + 416. \$10.75.

Reviewed by SOL L. GARFIELD

The first author, Charles B. Truax, received his PhD from the University of Wisconsin and for three years was an active participant in the psychotherapy research project headed by Carl Rogers. He is now Research Director, Arkansas Rehabilitation Research and Training Center and Associate Professor of Psychology at the University of Arkansas. The second author, Robert R. Carkhuff, received his PhD in counseling psychology from the University of Buffalo and held NIMH postdoctoral fellowships at Wisconsin and Kentucky. Until recently he was Director of Graduate Training in Counseling Psychology at the University of Massachusetts but he is now back at the State University of New York at Buffalo. Both he and Truax have published jointly before.

The reviewer, Sol L. Garfield, is Professor and Director of the Clinical Psychology Program at Teachers College, Columbia. He came to Columbia from Washington University in St. Louis. His current interests are mainly in the areas of research in psychotherapy, developments in brief psychotherapy, and in the constantly changing roles of clinical psychology. With Allen Bergin he is preparing a Handbook of Psychotherapy and Behavior Change for Wiley. He is a frequent reviewer for CP.

therapy in recent years. What is particularly noteworthy is the continuous interaction between research data and theoretical concepts that characterizes the book, and tends to set it off as different from most of its contemporaries. In many ways it symbolizes, hopefully, the gradual development and "coming of age" of this important part of clinical and counseling psychology.

Basing theory and practice on research findings and the constant attempt to evaluate practice in terms of evidence is to be commended in an area where more frequently recourse is made to authoritative statements and theory. Certainly, I have come across few books in the area of psychotherapy that are as closely tied to empirical investigation and the results of research as the present volume. While the style and presentation of the book leave something to be desired, it is, nevertheless, a stimulating book that offers much in the way of impetus for additional research on the part of others.

One of the central themes of the book is that psychotherapy may be "for better or for worse." This finding, which has received some notice recently, is derived largely from a series of studies in which the authors have been involved, either singly or in collaboration with others. Originally, as indicated above, the authors were participants in the psychotherapy project associated with Carl Rogers in Wisconsin, and their work reflects some of the basic concepts de-

IN the reviewer's opinion, this is one of the most important and provocative books that has been published in the areas of counseling and psycho-

rived from client-centered psychotherapy. Since leaving Wisconsin they have continued the line of research begun there and have added to it. They are clearly qualified spokesmen for the current client-centered point of view.

IN the present volume, the authors have attempted to bring together, to synthesize and to integrate many of the findings that they and others have reported previously in the literature. While many of the findings reported have been available in separate publications and unpublished reports, Truax and Carkhuff have performed a worthwhile service in bringing together these findings and in highlighting those which appear to be of definite importance.

Deriving from the previous work of Rogers and his collaborators, the authors posit three therapeutic conditions they believe are necessary for positive change to occur in psychotherapy. These are accurate empathy, non-possessive warmth, and genuineness or congruence on the part of the therapist. Most of the research presented pertains to the relationship of these three variables to the outcome, and a number of different samples of subjects have been studied including hospitalized schizophrenics, institutionalized juvenile delinquents, outpatients in a psychiatric clinic, outpatients in group psychotherapy and college underachievers. A variety of outcome measures have also been used including the MMPI, Rorschach, length of hospitalization, clinical rating scales, and grade point average. In general, the results are quite impressive. Positive change appears to be correlated with large amounts of the basic therapeutic conditions, while negative change or deterioration is associated with small amounts of these therapeutic variables. While these three conditions generally are positively correlated, the relationship among them and their relation to the outcome criteria fluctuates from study to study. Thus, the authors state "that when two conditions of the therapeutic triad are highly related but the third is negatively related, the prediction of outcome should be based on the two that are most highly related" (p. 92).

The book contains a great many specific findings and interpretations that are challenging and thought provoking. Among them is the view, in agreement with Eysenck, that psychotherapy as practiced today is generally no more effective on an over-all basis than no therapy. This is because effective therapy is lumped together with therapy that produces negative results. It is the authors' contention that when high levels of the basic therapeutic conditions are offered by the therapist, positive changes will result.

Another somewhat provocative view concerns the significance of the client with reference to possible therapeutic outcome. While there is some hedging in this regard, the authors appear to feel that the client is of secondary importance as far as outcome is concerned. If the therapist offers really large amounts of the basic therapeutic conditions, then apparently the client variable is of limited significance and positive results will be forthcoming. The authors do present some evidence in support of their view, but it is the reviewer's belief that more solid research data is necessary before their position can be fully accepted.

THE preceding comments refer mainly to the first half of the book which reviews the basic ingredients of counseling and the pertinent research evidence. The second section of the book is concerned with applying the knowledge gained from what has gone before to the more systematic training of counselors or therapists. Here, again, the authors appear quite ingenious in applying the fruits of research to the training of psychotherapists. Obviously, if the three therapeutic conditions are basic to positive outcome, then let's train people to be empathic, warm and genuine. This, the authors have done, and they have utilized the research scales developed for evaluating these conditions in their training of would-be therapists. This approach has been utilized in the training of graduate students, as well as in the training of "lay counselors," with what appear to be startling results. "The results suggest that in a relatively short training pe-

riod, i.e., approximately 100 hours, both graduate students and lay hospital personnel can be brought to function at levels of therapy nearly commensurate with those of experienced therapists" (p. 227).

As can be gathered from what has been said, this reviewer responded very favorably to the book. Nevertheless, it is not without its faults. The style and manner of presentation of the book could have been improved and there are numerous minor, but irritating, errors. These include bibliographical, grammatical, and typographical errors that appear to reflect carelessness in the editing of the book. The tabular material is frequently presented in a cursory manner and at times the data are incomplete—e.g. means are presented without standard deviations. In some instances the actual scores are lacking, and data are presented rather uncritically. The authors also appear to gloss over some possible discrepancies in different research reports in the interest of presenting generalized trends. This reviewer also reacted negatively to the fact that no constant measure or consistent value has been used in terms of what is considered to be high or low therapeutic conditions. This fluctuates from study to study and raises problems of the comparability of the findings from different studies where different groups of judges have been used. Finally, data of uneven quality with varying sized samples are presented together and much is made of low correlations that are not significant, but are congruent with the authors' general point of view. It is regrettable that a book with real value is marred by such deficiencies.

Over-all, the book is a noteworthy contribution to the field. While the therapeutic conditions discussed may not account for all of the variance in terms of change, and while additional research may modify considerably some of the conclusions recorded, the book should serve as a stimulus to additional research and as a model for the linking of research and practice in psychotherapy.



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**Hypnotically
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Paul Sacerdote. Introduction by
Erika Fromm

Induced Dreams. New York: Vantage Press, 1967. Pp. x + 174.
\$3.50.

Reviewed by C. SCOTT MOSS

The author, Paul Sacerdote, was born in Italy, received his medical education at the University of Turin Medical School, and in 1939 came to the United States. Presently he is in the private practice of psychosomatic medicine in the New York metropolitan area. He is a Fellow of both the American Society of Clinical Hypnosis and the Society for Clinical and Experimental Hypnosis.

The reviewer, C. Scott Moss, is Professor of Psychology at the University of Illinois where he specializes in community psychology.

THE book was written by a clinician for other practitioners interested in the art of the utilization of hypnotically produced dreams. About 45% of the book contains case reports

Sacerdote's treatment technique was induction of a series of structured dreams under hypnosis manifested either directly or posthypnotically. Each dream elaborated the preceding one. Dreams in therapy represent an effort to communicate and, therefore, all dreams in the clinical setting whether they are hypnotically or naturally induced, represent a structured and induced dream. Dreams in therapy are communications between patient and therapist, but more importantly they are considered to be a dialogue between the patient's conscious and unconscious thoughts of which the therapist may have only partial understanding.

According to Sacerdote, it is possible in hypnosis to give the dreamer a comprehension of the symbols he will employ in his dreams. Thus, voluntary dreams that in the orthodox analysis

may cover a period of months, may be elicited in one hour. More important is the fact that resistances may be overcome and the succession of dreams utilized by the patient in the place of free association. Deepseated problems are worked through under the protective cloak of innocent symbolic story-telling and/or amnesia. According to Sacerdote, the dream in therapy presents a natural projective outlet.

It is very difficult for anyone to write a book on hypnotic dreaming during a period when the electrophysiological study of dreaming is so prevalent. On pages 147-163, the author primarily alludes to the REM study of dreaming. He makes a number of assertions that may or may not be correct but that are still worthy of consideration: for example, that dreams produced during hypnosis may be psychologic or psychodynamic substitutions for REM dreams of natural sleep, and also that some hypnotically induced dreams may be psychologically, intelligently, emotionally and physiologically equivalent to the natural dream. Even if future studies should prove beyond doubt that the physiological needs satisfied by Stage 1 REM periods are the essential ones, the usefulness of artificially induced dreams could well represent a satisfactory method in psychotherapy.

It might be insisted that the author study hypnotic dreams for their own sake, as a distinctive form of fantasy peculiar to the altered state of consciousness called hypnosis. Nevertheless, Sacerdote has marshaled the evidence for his brand of therapy, whether we agree with it or not. Most of the evidence is conjectural at this time and it remains for the usefulness of his method to be tested in future experimental studies.



Come to think of it, for the average man it must be fairly difficult to write an honest letter of self-recommendation.

—JACK LONDON



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By Wolfgang Lederer, M.D. A thoughtful and thorough study concerning the intricate, perplexing and elusive relationships between the sexes. The author examines man's conflicting feelings and attitudes towards women and focuses on the precarious oscillation between love and fear. Dr. Lederer states that "because the aspect of fear has so generally been suppressed in our culture (though not in its individual members) it is the fear, and its vicissitudes in history, which will be stressed. It will be demonstrated how its denial, like the denial of any strong emotion, gave rise to varied psychopathology; and it shall be the thesis of this book that greater awareness of such denial is therapeutically indicated—awareness of its denial and repression in the patient as well as in the therapist." 368 Pages, 32 Illus., \$12.50

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Mark My Words

Philip J. Stone, Dexter C. Dunphy, Marshall S. Smith, and Daniel M. Ogilvie with Associates

The General Inquirer: A COMPUTER Approach to Content Analysis.
Cambridge, Mass.: M. I. T. Press, 1966. Pp. xv + 651. \$7.95.

Reviewed by EDWARD S. JOHNSON

The first author, Philip J. Stone, a Harvard PhD, can usually be found in Harvard's Department of Social Relations, but is spending this year at the Center for Advanced Study in the Behavioral Sciences. The second author, Dexter C. Dunphy, is also a Harvard PhD and is Senior Lecturer in Sociology, University of New South Wales, Sydney. Marshall S. Smith, the third author, with an EdD from Harvard, is Instructor in Education, Harvard. The fourth author, Daniel M. Ogilvie, is Assistant Professor of Social Relations and Education, and Research Associate, also at Harvard.

The reviewer, Edward S. Johnson, is Associate Professor of Psychology, University of North Carolina. He received his PhD from North Carolina and went to Yale for a while before returning to his alma mater. His main interest, since graduate student days, is in computer applications in psychology, with a special interest in information-processing models of human problem-solving behavior.

THE SUBJECT of this book, neatly camouflaged by its title, is content analysis. The general thesis of content analysis is that a systematic analysis of the words of a text can portray the underlying attitudes, feelings, biases, beliefs, etc., of its author. While many psychologists might quarrel with this, it is certainly true that there are situations in which the only data available are written records. In such cases, it is

certainly not unreasonable to explore some sort of content analysis. *The General Inquirer* is an attempt to objectify procedures which in the past have all too often been subjective, if not hazardous.

The General Inquirer is both the name of a group of content analysis computer programs and the name of the book describing the programs. Part I of the book is an introduction to content analysis in general and *The General Inquirer* programs in particular. Topics include historical trends, theoretical issues, a general description of the various programs, and a thorough discussion of good research strategy, including discussion of the many traps that may plague even the very careful researcher. Examples: distributions of frequencies are seldom normal; factor analyses are often performed where the number of variables exceeds the number of cases; often only α -percent of a set of results reach the α -level of significance.

Part II consists of 16 studies employing *The General Inquirer*, most of which were submitted by students of the authors. The range of application is quite wide, embracing such farflung topics as literary criticism and suicide notes. Unfortunately, the range of quality is no less wide. While those studies in which the authors had a hand are generally sound, many of the others did not follow an adequate procedure in either the over-all research plan or the analysis of the data. Indeed, the authors spend an

almost embarrassing amount of space in Part I apologizing for the shortcomings of the studies in Part II. One of these—"Studies in Psychotic Language"—is required reading for all who plan to do content analysis research. The authors of this little gem have somehow managed to break almost every precept laid down in Part I and, in doing so, have concocted the perfect example of how not to do it.

The reader who is exploring content analysis for possible application in his own area of interest may become bogged down if he proceeds chapter by chapter through the book. A more efficient procedure would be to skip from Chapter One directly to Chapter Seven (on methodology) and then immediately to a couple of studies, say a good one (e.g., Chapter Eleven, an analysis of newspaper editorials) and, for contrast, the above mentioned bad one. Then, if he is still interested, he can delve into the detailed Chapters Two through Six.

Over all, the book does an adequate job of describing a particular system of content analysis. It is certainly too long, as the authors readily acknowledge. Part I could easily be shortened by a third, and in Part II, the number of illustrative studies should have been cut in half. Also, the book seems to have been rather hastily put together. There remain a fair number of typographical errors that even a casual reading should have turned up.

A FEW WORDS are necessary concerning *The General Inquirer* programs. Any researcher who thinks he would like to give them a whirl should carefully consider the cost and effort involved.

On the plus side, *The General Inquirer* is one of the most sophisticated systems of content analysis available to the academic world today. In addition, most of the programs can be run on an IBM 1401, a plentiful and inexpensive computer.

On the negative side, the most severe limitation is that a critical part of the analysis must be run on an IBM 7090/94, a not too plentiful, rather expensive machine. Another drawback that could become quite serious is that *The General Inquirer* is in danger of becoming

an orphan. Only Smith of the original four developers is carrying on with refinements to the system. Fortunately, an independent group at Washington University (St. Louis) is implementing the system for IBM 360 machines. Finally, the user will have to lay out some \$50-\$100 to purchase a copy of the programs and a user's manual.

Thus the investigator should approach content analysis with caution. If he feels capable of coping with the complexities and frustrations of a large computerized system, then *The General Inquirer* may fill the bill. (Other systems which might be considered include WORDS by Norman Harway and Howard Iker at the University of Rochester and V-IA by Sally and Walter Sedelow at the University of North Carolina.) But he must be warned that content analysis, far from being a royal road to truth and understanding, is a long and arduous trial beset with many subtle pitfalls. That this is true will become obvious upon reading Part I of *The General Inquirer*. But on reading the better contributions in Part II, it will also become obvious that the programs, when used with skill, caution, and intelligence, can be a valuable research tool.

The Avian Brain in Three Dimensions

Harvey J. Karten and William Hodos

A Stereotaxic Atlas of the Brain of the Pigeon (Columba Livia). Baltimore: The Johns Hopkins Press, 1967. Pp. ix + 193. \$20.00.

Reviewed by H. PHILIP ZEIGLER

The first author, Harvey J. Karten, is an MD with training in neuroanatomy under Walle Nauta. He is currently Re-

search Associate in Neuroanatomy at M. I. T. The second author, William Hodos, is Chief of the Neuropsychology Laboratory at Walter Reed Army Institute of Research. He has published on self-stimulation and is currently collaborating with Karten on a study of the pigeon visual system.

The reviewer, H. Philip Zeigler, received a PhD in psychology and neurophysiology from Wisconsin and then spent two years at the University of Cambridge studying ethology under Robert Hinde. He is now Associate Professor of Psychology at the City College of the City University of New York. He has examined the role of avian fore-brain structures in nest building, habituation, and discrimination learning. He is co-editor with Charles Gross of three volumes of readings in physiological psychology to be published by Harper & Row.

DESPITE the pejorative use of the term "bird-brain," there is ample evidence that the behavior of birds is both complex and varied. Psychologists, characteristically, have concentrated upon one species (the pigeon) and have developed techniques for the study of sensory processes, motivation, and learning. Analyses of orientation, communication, and reproduction are available for a number of avian species. Indeed, with the exception of mammals, there is no other vertebrate class for which we have so large and diverse a body of behavioral data.

One might therefore expect widespread recognition that the study of avian brain function is both appropriate and imperative. Unfortunately for the development of a comparative neuropsychology, this is not the case. Most workers interested in neuropsychology are relatively uninterested in avian behavior, while those workers most interested in avian behavior rarely concern themselves with problems of avian brain function. The present volume may help to remedy this situation and is therefore welcome.

Certain of its features will be particularly appreciated by psychologists. The Introduction, for example, includes a lucid discussion of head holders and contains useful information about anes-

thetics, and directions for the preparation of brains for histology. Furthermore, the pigeon is an ideal subject for such an atlas because it is a relatively unspecialized bird, both morphologically and behaviorally and is the avian species most familiar to the psychologist.

THE BULK of the atlas consists of a series of excellent photomicrographs of transverse cell-stained sections through the entire brain, usually at 0.25 mm. intervals. A set of sagittal sections is a welcome bonus. (The magnification chosen, 15 X, undoubtedly represents the compromise necessary to present sections through the entire brain. A higher magnification at more caudal levels would have been desirable.) The photomicrographs are unlabeled and each is accompanied on a facing page by a labeled drawing framed by a set of stereotaxic coordinates, avoiding the messiness of labels on the plates. Abbreviations are defined on every page on which they appear and there is an alphabetical index of brain structures keyed to their AP locations.

One reservation must be noted. The atlas does not contain cytoarchitectonic descriptions, or discussions of pathways connecting various structures. This omission undoubtedly reflects the authors' feeling that sufficient data for a descriptive atlas are not yet available. Although defensible on such grounds, the total omission of descriptive material is disappointing.

However, the prime consideration in evaluating an atlas is the accuracy with which it guides the placement of depth electrodes. By this criterion the atlas is a superb research tool, having already been of invaluable assistance to a number of workers.

It is to be hoped that the availability of this atlas will stimulate additional research on avian brain function. Such research may provide the impetus for a re-examination of some of the classic problems of vertebrate neuropsychology within the broader framework provided by a comparative perspective.



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On the Analysis of Self-Analytic Groups

Richard Mann, in collaboration with Graham S. Gibbard and John J. Hartman

Interpersonal Styles and Group Development: An Analysis of the Member-Leader Relationship. New York: Wiley, 1967. Pp. ix + 308.

Reviewed by HARVEY A. HORNSTEIN

The three authors, Richard Mann, Graham S. Gibbard, and John J. Hartman, all completed their undergraduate work in the Department of Social Relations at Harvard University. Mann received his PhD from the University of Michigan, has taught at Harvard and is now Associate Professor of Psychology at Michigan. Gibbard and Hartman are now graduate students in the Clinical Psychology Program at Michigan.

The reviewer, Harvey A. Hornstein, received his PhD under Morton Deutsch from Teachers College, Columbia University, and he remains there as Assistant Professor of Psychology in the Doctoral Program in Social Psychology. He has conducted research on interpersonal and intergroup cooperation, and more recently, on prosocial behavior and social responsibility.

DURING the summer of 1946 the Research Center for Group Dynamics (then at the Massachusetts Institute of Technology) and the Connecticut Interracial Commission jointly sponsored a workshop for community leaders. Each evening the research and training staffs gathered to pool their observations of the day's events. At some point, a group of participants joined these meetings and, a short time later, claimed

that they were learning more about their own behavior and their group's development from these evening meetings than they were from their daytime sessions.

These events are commonly believed to be the origin of the experience-based method of teaching people about interpersonal relations and the processes involved in group development. The method employs groups whose only agenda is its own self-analysis. *Interpersonal Styles and Group Development* is an exhaustive study of leader-member interaction in four such groups, whose members were enrolled in a course at Harvard University entitled, "Social Relations 120: Analysis of Interpersonal Behavior."

The groups were not small; there were twenty to twenty-five members and a leader who was the instructor with the power to grade the participants. The members of the groups included undergraduates from Harvard, Radcliffe, and other nearby colleges, in addition to a number of graduate students, secretaries, and ministers. Without question, this was an unusual population, in an uncommon setting. Why, then, would any researcher want to study these groups?

Taking note of the problems of generalizing from their findings, the authors suggest that a careful investiga-

tion of leader-member interaction in these groups might be useful to two audiences: (1) Professionals who are concerned with studying or leading self-analytic groups, and (2) any group of workers such as "teachers, healers and other 'front-line' professionals who would like to bring some order out of the rich but chaotic data with which they grapple daily."

In an effort to speak to both of these audiences the authors chose to use both quantitative and naturalistic experimental procedures. For the former, they developed an observation schedule which allows for the recording of both direct and symbolic interaction between members and leaders. The system has sixteen categories of performance which were reduced into six bi-polar factors through the use of an unnamed factor analytic technique. These categories are subsumed by four subareas (Hostility, Affection, Anxiety, Depression), that are, in turn, subsumed by three over-all areas (Impulse, Authority Relations, Ego State). It is impossible to comment on the conceptual basis of the system since the book fails to discuss the rationale underlying its development. One is left to wonder whether the scoring system is a consequence of a priori decisions or whether it has some empirical or theoretical basis.

The observation schedule treats all member performances as though they were indicative of the performer's relationship to the leader. Although the authors are careful to say that they do not assume that leaders are the focal points of all performances, they nevertheless interpret their data as though this were the case. They use one notable innovation, however, which is a scale upon which observers note the "level of inferences" they used in coding the observation. These levels reflect the coder's perception of the extent to which the member's statement makes increased use of symbolic rather than explicit reference to the leader, himself, or other members.

Insufficient data are presented to allow adequate determination of the system's reliability. They indicate the extent to which scorers agree about whether or not given acts are relevant to the member-leader relationship, but

they do not indicate what percentage of all the acts are so coded. The latter information is necessary in order to evaluate the true extent of rater agreement. If, for example, all the acts are coded as reflecting member-leader relationships then high agreement would have no significance. Without elaboration, we note that measurement and interpretation problems are compounded further because of the admissibility of double-scoring (i.e., one utterance can be simultaneously scored in two categories), the likely inter-dependence of some categories, and the imprecise, often contradictory, definition of categories.

The primary analyses of the observational data are presented in three of the book's eight chapters. These chapters deal with data relevant to (1) the interpersonal styles of leaders and their responses to diverse performance of group members; (2) the groups' developmental stages; and (3) the individual styles that were characteristic of these four groups. In each case, the authors first present the observational (quantitative) data. Then, they employ case material and psychoanalytically-oriented clinical interpretations to answer the questions raised by the data and to illustrate their interpretation of the quantitative data. At times, these analyses present useful insights; more frequently, they are excessively long and superficial. For the researcher, they lack the coherence and specificity of a theoretical system, and for the practitioner they lack the organization and clarity of a useful descriptive model.

IN each chapter the analysis and interpretation of the data is loosely related to the four different definitions of group work that are identified by the authors: enactment—attempts to develop an intellectual or cognitive scheme for interpreting group events; independence—establishment of a peer relationship with the leader; involvement—movements toward greater engagement and commitment within the group; expression—disclosure of one's feelings as they occur in the course of group interaction. For example, the several individual interpersonal styles gleaned from the data are explained as strategies

emerging from one or more of the definitions of work. Similarly, group development is described as if it were a consequence of shifts in the nature, power, and composition of sub-groups that adhere to different definitions of work.

The generalizations emerging from these data are not compelling nor are they stated in any precise, systematic fashion. In identifying the various determinants of member-leader relationships, e.g., individual differences, the nature of the situation, and leader behavior, the discussions are often only a recapitulation of the data, with no attempt to state more general, organizing principles. Moreover, there is no discussion of the ways in which these various determinants interact with one another to produce identifiable changes in interpersonal behavior and group development. Despite these shortcomings, however, because of its potentially useful innovations in data collection, the book can be recommended to those interested in conducting research with self-analytic groups.

Psychiatric Potpourri and Humble Pie

Fredrick C. Redlich and Daniel X. Freedman

The Theory and Practice of Psychiatry. New York: Basic Books, 1966. Pp. xii + 880. \$12.50.

Reviewed by ARTHUR CANTER

The first author, Fredrick C. Redlich, is Chairman of the Department and Professor of Psychiatry at Yale University and Director of the Connecticut Mental Health Center. He is co-author with Merton Gill and Richard Newman of The Initial Interview in Psychiatric

Practice, and with August B. Hollingshead of Social Class and Mental Illness. The second author, Daniel X. Freedman, is Professor and Chairman of the Department of Psychiatry at the University of Chicago. He was formerly Director of the Graduate Training Program in Psychiatry and the Neurobehavioral Sciences at Yale.

The reviewer, Arthur Canter, is Professor of Psychiatry and Chief, Psychology Service, University of Iowa Psychiatric Hospital. His PhD is from the University of Iowa and he has worked with psychiatrists and other medical specialists on research, diagnostic, and treatment problems for over 15 years. He claims to have eaten humble pie and on occasion has fed it to his colleagues.

THE PSYCHOLOGIST working in the medico-psychiatric setting is not wont to describe his psychiatric colleagues as exhibiting humility. The awareness that there is indeed much not understood about the basis or treatment for behavior disorders has rarely interfered with the practice of psychiatry. I doubt that the explicit awareness of this state of affairs by Redlich and Freedman in their book will change matters much, but it is a refreshing approach.

It would be an error to regard this book as a *manual* for the budding psychiatrist. In part this is a dilemma created by confessing incomplete knowledge. Such admissions do not build confidence in a student already shaken by the inapplicability of much of what he has learned in traditional medicine to the diagnosis and treatment of the psychiatric patient. Also, listing the nomenclature of *The Diagnostic and Statistical Manual, Mental Disorders* (of the American Psychiatric Association), and then ignoring it for all practical purposes in the extended coverage of the various disorders may add confusion to the picture. This is not to say that the presentation, which is somewhat biased toward psychoanalytic views, will make the student less effective, or ill befit him for practice. But this is hardly the way to inspire confidence in the healer to know what he is doing and to convey this impres-

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**METHODS OF STUDYING THE INDIVIDUAL
CHILD: THE PSYCHOLOGICAL CASE STUDY**

John Rothney

July 1968



sion to his patient. I can see where a textbook such as the seemingly ubiquitous Noyes and Kolb (now in its sixth edition) will be preferred by the psychiatric resident-in-training. That book is straightforward, definite, orderly, practical as a desk manual, and was designed to keep the resident confident that he, as a physician, is faced with a disease he can diagnose and a treatment he can prescribe. However, if the psychiatric student, or his teacher, wishes to gain a rather comprehensive overview of the neurobiological and socio-psychological conceptualization of behavior disorder, he is well advised to add the Redlich and Freedman book to his library. It suffers perhaps from too many uncritical surveys of some sources of data and there is bias here and there in the selection of studies used to propound views. Also, it would have helped to have spelled out the "sick role" concept in a more integrated and comprehensive manner, for one rarely encounters this view in standard textbooks. The chapter on psychological tests (written by Roy Schafer) contains cogent information on the usual Rorschach, TAT, WAIS, pre-computer-programmed MMPI, etc. There are other tests; however, no disservice is done inasmuch as the psychiatric specialty board examinations on psychological tests tend to be restricted to the old warhorses. The discussions on pharmacotherapies run the risk of getting out of date considering the rapid advances in the field. Such are the pitfalls for any textbook that is intended to be an "up-to-date guide." We merely have to await the second edition of *The Theory and Practice of Psychiatry*.



Doctor gave me an objective glance
And I saw, as clear as day,
That I had with mine, the lay,
Challenged his, the esoteric ignorance.

—NAH BRIND



A Tapestry Barely Begun

Richard Jessor and Seymour Feshbach (Eds.)

Cognition, Personality, and Clinical Psychology: A Symposium Held at the University of Colorado. San Francisco: Jossey-Bass, 1967. Pp. xv + 222. \$7.50.

Reviewed by SALVATORE R. MADDI

The first editor, Richard Jessor, received his PhD from Ohio State University and has been Director of Clinical Training and co-director of the Tri-Ethnic Research Project, both at the University of Colorado. He has held a Social Science Research Council Fellowship at Berkeley and an NIMH Fellowship at the Harvard-Florence Project in Italy. Currently he is Director of the Research Program in Personal and Social Problem Behavior in the Institute of Behavioral Science at the University of Colorado. Seymour Feshbach, the second editor, a Yale PhD, is Director of the Psychology Clinic School at the University of California, Los Angeles. He has taught at the University of Pennsylvania, Berkeley, and at the University of Colorado and has held an NIMH Fellowship at Stanford.

The reviewer, Salvatore R. Maddi, received his PhD from Harvard University and is now Director of Clinical Training in the Department of Psychology and Chairman of the College Psychology Program in the Social Science College, at the University of Chicago. He is interested in the need for variety as a characteristic of personality, in personality change, and in psychological growth. He is co-author with Fiske of *Functions of Varied Experience*, and author of the recent *Personality Theories: A Comparative Analysis*.

HAPPILY, the past 15 years have brought such a renewal of interest in the cognitive processes that psycholo-

gists are no longer in danger of neglecting this basic area. The renaissance has been mirrored and spurred by the symposia on cognition begun 10 years ago at the University of Colorado. The present book comprises the third symposium in the series, and has the stated aim to "explore the implications of the work in cognition for the field of clinical psychology."

In pursuit of its aim, the book presents six original essays by well-known people in personality and psychopathology, and a short afterword by the editors. This was not the kind of symposium in which all participants adopted the over-all aim of the enterprise as the major frame of reference for deciding what to say. Rather, the primary determinant of their statements was the nature of their current work, with the over-all aim of the symposium of secondary importance. In view of this, and the large scope of the aim, it is not surprising that the papers vary widely in content, method, and purpose. In the first paper, George S. Klein reinterprets psychoanalytic views on motivation and repression to put greater emphasis upon the cognitive elements of wish and object, deemphasizing considerations of biology and tension. Also theoretical is Anthony F. C. Wallace's remarkably detailed theory of identity processes, which focuses upon discrepancies from reality of ideal and feared identities, and the work engaged in to rectify the discrepancy. In a primarily empirical paper, Eric Bermann and Daniel R.

Miller explore the factors determining change and stability of roommate relationships among student nurses, concluding that values and beliefs are of major importance. More theoretically, Julian B. Rotter discusses beliefs, social attitudes, and behavior, using as an example of his position the research indicating that active and passive behaviors are a function of beliefs in one's own power or powerlessness, respectively. Next, Michael A. Wallace works from psychoanalytic theory to research and back in an intriguing attempt to understand the kinds of people in whom music produces symbolic sexual arousal. Finally, Eliot H. Rodnick brings us up to date on his research with Garmezy concerning cognitive processes in schizophrenics.

Individually, the papers are interesting, even noteworthy, but nowhere do they address each other. Whenever they overlap in content, no meeting of the minds is involved. This certainly means that any unified overview concerning the aim of the book must be provided by the editors or the reader himself. The editors do suggest a few conclusions, such as emphasis on the dynamics of systems of thought rather than biological drives and appetites, emergence of the concept of identity as central in the study of cognition and behavior, renewed interest in situational variables, and agreement that the analysis of human behavior is very complex. Also, the editors suggest that clinical psychologists have remained unimpressed with personality research because, until recently, it has lacked some of the emphases just mentioned. Surely this is an interesting beginning, but the editors do little further analysis and synthesis. The papers are as colorful skeins of wool, and the book is as a tapestry barely begun.

SHOULD it not be possible to say more about the relationship between the work in cognition and clinical psychology? Is it likely, as the editors contend, that a cognitive emphasis in research and theorizing is more relevant to the clinician's concerns than the more traditional emphasis on motivation? Perhaps, if the cognitive processes are construed as de-

pendent variables (as in Rodnick's paper), but not really if they are construed as independent variables (as in the papers of Klein, Wallace, Bermann and Miller, and Rotter). Clinicians since Freud have considered the wellsprings of behavior to be instinctual, irrational, nonintellective, and biological. If the emphasis on cognitions as true and important causes is to have impact on the clinician, he will have to be re-educated to some degree, for he will not agree spontaneously. Some of the research in this book, such as that cited by Rotter, is relevant enough to serve as the basis of a re-educative attempt, but no such attempt is undertaken.

Before long, some general questions will have to be asked of psychologists emphasizing cognition. In this book, for example, of the four essays assuming thought processes to be causal factors, two (Klein, Bermann and Miller) imply that thought processes articulate in some way with underlying drives and appetites. For all his emphasis upon pre-emptory ideation (repressed thoughts), Klein still considers the impetus for repression to be social disapproval of wish content that presumably expresses instincts. And Bermann and Miller conclude that a girl's values influence her popularity partly on the basis of findings using the Edwards Personal Preference Schedule. Although this test is usually considered to measure needs, the authors interpret it as indicating values, without any serious attempt at justification. What is the relationship of cognitive processes to other units of personality, such as needs and instincts? Certainly cognition cannot be elevated to the role of independent variable by fiat alone. And only a hop, skip, and jump away is the question of what is new, really, in our current emphasis upon cognition?



You cannot make rules precede practical experience.

—ANTOINE DE ST. EXUPERY



Behavior: Structure in Action

Lloyd S. Woodburne

The Neural Basis of Behavior.
Columbus, Ohio: Merrill, 1967.
Pp. vi + 378. \$10.00.

Reviewed by JOHN J. BOITANO

The author, Lloyd S. Woodburne, received his PhD from the University of Michigan and spent the next year in Berlin working with Kohler. He returned to the University of Michigan as Assistant to the Dean and spent the next 27 years in administrative work. He resigned as Dean of Arts and Sciences at the University of Washington in 1960 to return to teaching and research. He is now Professor of Psychology at the University of Washington. He taught physiological psychology and spent the summers of 1962 and 1963 as Postdoctoral Fellow in Physiology where he studied neurophysiology and the techniques of brain surgery.

The reviewer, John J. Boitano, is Associate Professor of Psychology at Fairfield University. His MA and pre-thesis training at Fordham University were in clinical psychology and included an internship at the Institute of Living, Hartford, Connecticut. His thesis was done in the Department of Experimental Psychology at the Institute of Living, where he received his baptism into the fields of psychopharmacology and physiological psychology. He has worked under Isaacson at the University of Michigan and with Snider at the Center for Brain Research at the University of Rochester.

PROFESSOR WOODBURN has attempted to bridge the gap "that exists between the very elementary texts and the medical compendiums" (p. iii). He has succeeded, although the final product tends more towards the former than the latter. This book was written for students with minimal exposure to the basic facts of neuroanatomy and neurophysiology. A rudimentary knowledge of these areas will surely be gained by

the beginning student, especially if parallel lectures are given at a slightly higher level and in greater detail.

A major obstacle for a book of this nature is the tendency towards oversimplification. In some instances this has been avoided and the topics have been clearly and concisely presented. The sections dealing with the transducer function of sense organs, the summary of the spinal fiber tracts and nuclear groups together with their location, level of termination and function, the summary of the cranial nerves, and the physiology of audition and vision, are all exceptionally well done. On the other hand, there are flaws. For example, the idea that the "hippocampus is clearly involved in memory fixation . . ." (p. 235) is only partially correct in view of recent experimental evidence suggesting enhanced performance as a result of bilateral hippocampal ablations. Furthermore, since the entire output of the cerebellar cortex via Purkinje cell axons has now been definitely established as inhibitory, the statement that the "Purkinje cells may be inhibiting or facilitating according to their rate of discharge . . ." (p. 258) needs revision. The reviewer would also suggest further elaboration in his description of the interhemispheric connections of the bilateral amygdoloid complex.

A MAJOR critique of the book is the lack of individual citations to previous studies. Facts are presented unencumbered by references, which leads to a frustrating plethora of such terms as, "The experimental data which are available," "Recent evidence," or "On the basis of limited experimental data," etc.

The book could be effectively reduced and condensed in size. There is much replication and overlap of content. Some examples of topics that have been treated more than once include synaptic transmission, the gamma efferent system, the vestibular nuclei, and the corticospinal tract. Moreover, the book is padded by the unnecessary duplication of 13 figures! The repetitious material could have been replaced by more adequate explanations of the figures either in the text itself or in the

captions. In some instances, the relevance of a particular figure to the discussion is questionable.

Content areas that could have been included or expanded upon include a description of EPSP's and IPSP's, types of synapses, voltage-clamp experiments, the internal circuitry of a cerebellar folium (Snider's *Scientific American* schema is somewhat out-of-date), split-brain experiments, secondary and sup-

plementary cortical motor areas, and perhaps, the most conspicuous omission, RNA mechanisms of memory consolidation.

Despite the above criticisms, Professor Woodburne has provided a readable primer of neural structure and function. Its wide breadth of content amply provides an adequate basis for a more advanced comprehension of brain-behavior relationships.

Attendance is the Measure

Michael Balint, Enid Balint, Robert Gosling, and Peter Hildebrand

A Study of Doctors: Mutual Selection and the Evaluation of Results in a Training Programme for Family Doctors. Philadelphia: Lippincott, 1966. Pp. xii + 146. \$5.00.

Robert Kellner

Family Ill Health: An Investigation in General Practice. Philadelphia, Pa.: Lippincott, 1966. Pp. xi + 112. \$4.50.

Reviewed by CONSTANCE HANF

The authors of both monographs are staff members at the Tavistock Clinic and its associated Institute of Human Relations and share its interests in the structure of function of groups—particularly family, psychotherapeutic, and training groups as they relate to medical practice. Michael Balint, now retired, a Hungarian-trained physician and psychoanalyst, has pioneered since 1950 in training physicians through the medium of group interaction. He is author of *The Doctor, His Patient, and the Illness*, and, with Enid Balint, of *Psychotherapeutic Techniques in Medicine*. His three colleagues, Enid Balint, Robert Gosling, and Peter Hildebrand, share staff responsibilities in the Clinic's training and research efforts. Robert Kellner, a physician sharing in a general practice in the North of Britain, has participated in and has led "seminars" at the Clinic. His investigation reflects the orientation

and the effective outcome of the Balint-Tavistock approach.

The reviewer, Constance Hanf, is an experimentally oriented clinical psychologist who received her PhD at Pennsylvania State University and is now an Associate Professor of Medical Psychology at the University of Oregon Medical School. She is currently engaged in helping third-year medical students to observe, define in behavioral terms, and then modify systematically the problem behaviors present in interactions between mothers and their physically handicapped children.

DESPITE subject matter differences, the monographs of Balint et al, *A Study of Doctors*, and of Kellner, *Family Ill Health* share similar conceptual and methodological orientations. Both subscribe to the view that physicians should recognize the interpersonal, emotional

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Volume III, presents reports and discussions of research studies presented at the Third Research in Psychotherapy Conference held at the Center for Continuing Education, University of Chicago, June, 1966. The Conference was sponsored by the Division of Clinical Psychology, American Psychological Association.

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and physiological components of the problems presented by patients, as well as the psychological aspects of a physician's interactions with patients. Both reports employ frequency counts of the attendance of individuals in order to support their investigations with quantitative data. In Balint, attendance data are used to guide the staff in determining both the psychological development of physicians and the effectiveness of training seminars, while in Kellner, frequency data are used to describe the attendance patterns of family members who constitute part of the author's general practice.

In *A Study of Doctors* a staff of the Freudian analysts and one psychologist assesses the effectiveness of its training program for general practitioners, the goal of which is to increase the practitioners' psychological sophistication and skill through participation in "The Seminar." The Seminar, initiated by Michael Balint in 1952, and for a time thereafter conducted solely by him, provides the occasion for physicians and their seminar leaders to study and practice, for undetermined periods of time, those psychological behaviors that have been isolated during the course of their interactions with each other.

Since a 50 percent drop-out rate among participants appeared to be stunting the growth of the young program, attendance was recorded systematically, three times yearly for a twelve-year period. Continuous study of this data resulted in innovations designed to decrease selection and program weaknesses, i.e., use of a Mutual Selection Interview (MSI), classification of participants in the program into one of six personality categories such as early leavers and late leavers, and expansion of the staff from within the ranks.

The MSI, which contains a set of items devised by M. Balint and was designed to eliminate applicants classified by the staff as "poor risks" and "early drop-outs," was used by two psychiatrists to evaluate the suitability of all subsequent applicants for the program. Criterion items in the MSI focused upon the applicant's manner of presenting his written application, his personal and professional problems, his self-concept as a general practitioner, and important

moments in the interview. Comparison of attendance data preceding and following the use of this instrument shows: 1) that over a two-year period acceptance of potential "poor risk" applicants decreased markedly, 2) that 28 percent of the applicants accepted in the program agreed with the interviewer's conclusion concerning their suitability for it, and 3) that the overlap group, those who agreed with the interviewer concerning their suitability, but who, nevertheless, did not attend, reached 19 percent or eleven out of fifty-six.

The reader will be able to locate on a continuum extending from clinical to statistical inference-making the orientations of the four authors. Their orientations are reflected in the style, method, and conceptualization of the eight sections of the monograph.

SINCE Balint's Seminar predates current training experiences for professionals in group interaction, his efforts to define training goals and to isolate factors relating to physician interest or disinterest in the program must be viewed in their temporal context. Few guidelines were available when Balint instituted the program; thus, to bring specificity and ordered training experiences into a clinically-oriented program was a difficult task. Reasoning that few criteria could be formulated to determine when a physician had achieved competence in using psychological skills, the staff hoped to standardize admission procedures prior to specifying and defining training goals. The program developed, then, from 1952 to 1964 with general, clinically-stated goals, with a selection procedure, and with no specification of termination points for participants. The latter condition may have encouraged individuals to become "late-leavers." Attendance data for this important group is not as clearly presented as is that for the "early drop-out" group so that little more than mention can be made of it.

Finding a best fit between applicant and program offered is a problem that continually plagues educational institutions. Personal characteristics, grades, and observations of performance in field situations are a few of the variables that

have been considered by training institutions in the past. Balint's staff, using both *a priori* and *ad hoc* reasoning, attempted to draw valid conclusions from the attendance data following introduction of the MSI, following their classification of participants into categories defined by inferential and behavioral criteria, and by applying descriptive statistics to the data.

One wonders whether reduction in the number of "early drop-outs" which is attributed to use of the MSI can be credited solely to this instrument, since the interviewer's personal judgment of significant moments in the interview, applicant's self concept, etc., also contribute to acceptance or rejection of the applicant. Only one interview and one interviewer per applicant were used. Perhaps the subsequent attendance data reflect interviewer judgment. In this event the MSI may not be the critical factor in the data changes.

Classification of early and late leavers on a large set of personality variables was made intuitively by staff judgment of applicants early in their participation in the program. The attendance patterns of these groups were then observed. Because of the overlap in groups, the reliability of this data is questioned by the authors themselves.

For those concerned with objective assessment of outcome of a program or of selection procedures using the attendance of voluntary participants, Balint's approach provides a useful point of departure.

KELLNER in *Family Ill Health* examines the home and office visit pattern for each patient in his practice who: 1) requested help for some emotional disturbance, or for some somatic symptom with no organic pathology, 2) was registered with this practice for two consecutive years, 1958-1959, 3) resided within a three-mile radius of the medical center and, 4) had at least two members of the family as patients in this practice. Sixty primarily working class families out of a 356-family practice met the three criteria and constituted the sample from which Kellner sought answers to two questions: What, if any, are the direct or indirect effects of a

patient's visit upon the medical problems of the relatives and how can these effects be described?

Using already existent patient-contact records for the sample, Kellner classified 146 paired attendances or clusters of attendance according to reason for joint or clustered office visits. These classifications include: coincidence, escorts' symptoms (A brings B but A consumes major physician time), maturing of a resolution (A has needed medical help but waits until B's illness to seek it), and spread of ill-health (A's illness produces physical symptoms in B).

Waiting for subsequent investigation is the author's observation that in 48 of the 60 families so studied, interactions occurred when the illness of one member apparently caused symptoms in another member. These interactions were noted to occur almost exclusively between mother and child with only one occurring between father and child. Also it was noted that a wife's illness followed that of her husband's twice as often as did the reverse situation.

CAUTION must be urged against ascribing psychological causality to pairs or clusters of attendances. Mothers interact with their children daily for longer periods of time each day than do fathers. Thus Kellner's findings, as he too indicates, may merely reflect this sociological condition.

One might also question the label of "neurotic" as it is applied here, i.e., to any consultation where the physician is unable to find a somatic origin for the patient's symptom. Since, as Kellner reports, it has been shown that over a five-year period most patients seek medical help at least once for some non-organically based symptom, it seems likely that by extending the time span of the present survey into a five-year follow-up study of these same families, the presence of "neurotic" symptoms in patients might deserve a more general rather than pathological connotation.

One wonders whether at this early stage a less precise but mutually exclusive categorization of reasons for pairing or clustering of patients would have produced less overlap and possibly more clearcut differences between groups?

Clearly, this is a select sample, one-sixth of the total family population in the author's practice, and it may not be representative of families in the total practice. Sample size also limits observations to this so-classified "neurotic" sample of patients.

This survey of attendance patterns in the population of families constituting the author's general practice provides a model for physicians and clinically oriented professionals in conducting descriptive, exploratory, and pilot research. The approach offers a simple means for obtaining base-rate data about family interaction as it relates to general practice. The refreshing candor with which the author reports the design and the statistical problems of the study merits acclaim by all who follow the scientific method.

The solid contribution of the investigation would seem to rest with the novel and measurable approach to events rarely noted in medical practice. The survey findings produce many provocative questions, the answers to which might alter considerably a physician's approach to and treatment of his patient. A return visit is prescribed.

The State of the Art

E. Roy John

Mechanisms of Memory. New York: Academic Press, 1967. Pp. xii + 468. \$14.00.

Reviewed by LEWIS PETRINOVICH

The author, E. Roy John, is Research Professor at the Brain Research Laboratories, Department of Psychiatry, New York Medical College.

Lewis Petrinovich, the reviewer, received his PhD under the inspiration of Tolman and the discipline of Krech at the University of California, Berkeley. His published research includes animal

motivation, drug enhancement of learning, and statistics. Currently he is "engrossed" in considerations of the nature of brain function in cognitive processes, especially in language development. He is Professor of Psychology at the State University of New York at Stony Brook.

THIS BOOK makes a major contribution to our understanding of the relationship between complex behavioral phenomena and underlying brain function. On the basis of an impressive array of studies, a theory of brain function is formulated. This evidence is based on techniques that have only recently been developed; therefore, this book is a good summary of the 'state of the art.'

The book must be evaluated from three separate points of view: first, as a critical review of the history and current data on memory storage and retrieval; second, as an undertaking in theory; third, as a research monograph.

As a critical review of the relevant literature on memory the book is excellent. It contains lengthy presentations of the theories of Lashley and Hebb and quotes extensively from the writings of these two theorists. There is a detailed review of the electrical and chemical studies bearing on memory consolidation, of the evidence for state dependent learning, and of the research that implicates nucleoproteins in the memory process. The author also provides an excellent review of the evidence indicating that "mere contiguity of activity in two neural regions suffices for the establishment of a functional relationship between them so that stimulation of one produces activation of the other." Thus, the book is highly recommended as a critical review, and most readers will find the 29-page bibliography to be quite useful.

As a theoretical contribution it represents a logical extension of Lashley's principle of equipotentiality and Hebb's conception of phase sequences. The major difference from these earlier conceptions is an emphasis on the informational significance of temporal patterns of neural discharge in the brain.

Briefly, the theory assumes that:

"(1) the information in a neural network is the deviation of the average re-

sponse of the network from the baseline activity . . . (2) the time course of the average activity reflects a mode of oscillation. A particular mode of oscillation in certain structures represents a particular event . . . (3) information storage consists of enhancement of the probability that a plastic network will display a particular mode of oscillation. Initiation of that mode of oscillation constitutes retrieval of the stored information . . . (4) stable and plastic networks exist in functional parallel in many anatomical regions . . . The output of the two kinds of networks travel to a comparator (which estimates the congruence between the mode of oscillation in the two networks . . .) (5) coincidence between the two modes constitutes identification of a present event as one which occurred before" (p. 148). The theory is attractive and has inspired an interesting research program.

ALTHOUGH the research presented is provocative and extremely interesting, much of it can be considered to be little more than pilot data. Most of the original research evidence is presented sketchily and many of the primary references are to "unpublished observations." The majority of the data presented is either in the form of typical EEG tracings or of average response curves. There is a problem with both of these sources of data: only a small sample of the total data collected on any one animal can be analyzed. Therefore, the investigator must sample from the total record. The question of the adequacy of the sampling procedures is one which remains unanswered.

The only quantitative analyses presented (with the exception of one χ^2 analysis which violates the independence assumption, p. 323) are factor analyses of correlation matrices based on averaged wave forms recorded from various anatomical loci. The interpretation of such factor loadings is a bit difficult since they are so far removed from the basic data.

A discouraging aspect of the book is the confusing structure of many of the sentences and the over-all weak writing style; extensive editing would have helped considerably.

All in all, the merits of the book far outweigh the faults that have been mentioned. It points the direction that future research must take if a clearer understanding of the relationship between cognition and brain function is to be achieved.

The Missing Ingredient

Max Hamilton (Ed.)

Abnormal Psychology. Baltimore, Md.: Penguin Books, Inc., 1967. Pp. 332. \$1.65.

Reviewed by NORMAN ABELES

The editor, Max Hamilton, is Nuffield Professor of Psychiatry at Leeds University in England and received his medical education from University College in London. He is a member of the editorial board of the British Journal of Psychiatry and the Journal of Social and Clinical Psychology. He is the author of two other books, Psychosomatics and Lectures on the Methodology of Clinical Research as well as numerous articles in the fields of mathematics, statistics, psychology, and psychiatry. His interests are in the application of scientific method to psychiatry with special reference to the design of experiments and the statistical analysis of results. In 1959, as a visiting scientist he served as acting chief of the section of clinical psychiatry, Clinical Neuropharmacology Research Center, NIMH.

The reviewer, Norman Abeles, received his PhD from Texas in 1958 and is currently Professor of Psychology and Assistant Director of the Counseling Center at Michigan State University. He holds an ABEPP diploma in counseling psychology. His research interests are in the area of process and

outcome studies in psychotherapy. He is currently completing a book on abnormal psychology that will focus on some of the theoretical and pragmatic differences and similarities between normal and abnormal.

How many of us have ever read anything by Kraepelin except what might be quoted in a textbook? Of those who have read Jung's work on word association, how many have read his 1908 contribution dealing with the content of the psychoses? How many of us are even aware that in 1874, W. W. Gull wrote an article on *anorexia nervosa*? "So what"? you may ask. "So plenty"! implies the editor. Dividing the field of abnormal psychology into four areas (descriptions of clinical syndromes, psychological methods as related to abnormal behavior, experimental research in relationship to animal disturbances, and classical dynamic theories), the editor contends that we need to look at these foundations not only for their historical value but because these foundations are directly relevant to the problems of today. Further, the editor narrows his selections by avoiding theoretical and speculative material because there is already too much speculation and theorizing based on too little evidence. Dr. Hamilton is also convinced that current progress in the treatment of mental disturbances will lead us toward a renewed concern regarding nosology. He states his position with eloquence: "I am convinced that in the coming decade, the return to the basic principles on which Kraepelin founded his work (rather than to the details of his findings) will be the most significant aspect of abnormal psychology as studied in the clinic." A final criterion for selection is that the readings include several that are either out of print or difficult to obtain in most libraries.

EDITIONS of books of readings remind me of master chefs mixing various known ingredients in a creative fashion hoping thereby to come up with a recipe that is both palatable and digestible. Some recipes, while considered delicacies in their own land, are often viewed with suspicion and distaste elsewhere. Aside

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from that, the fanciest dessert may be wasted on the meat and potato devotee. In this particular case, the recipe does not require a large number of ingredients. Briefly, it goes like this: Take two parts of Jung, some Pavlov, and a bit of abnormal behavior in the rat. Add some experimental neurosis, a cup of life style, and a measure of communication among schizophrenics. Mix well with a goodly amount of Kraepelin, a taste of empiricism, and add some organic reaction types. Season with a pinch of *anorexia nervosa*, a dash of Janet and a smidgen of Freud. *Voilà!*

The problem with the recipe lies not with the ingredients, for they are a combination of a few household staples and a number of rare spices. Instead, the question is one of intended audience for this repast. For the student taking the typical undergraduate course in psychology the meal will seem too heavy and too spicy, particularly since the readings are not keyed to any text. The graduate student may find this book more to his taste particularly if he is seeking informative reading outside the confines of his required coursework. This volume will find the greatest acceptance from those who wish to be intellectually challenged and can afford the time and energy required to stop and review some of the historical antecedents as covered by these fourteen selections. In this regard, it would have been helpful to partake of the editor's expertise via an integrative chapter. Editors ought to stop being so modest!

Finally it should be pointed out that the section on dynamic theories consists of selections which are much more descriptive than theoretical or speculative and seem reminiscent of the section on the classical description of syndromes. It should be recognized that many psychologists consider theory and speculation as vital heuristic lubricants. For many, therefore, a book of readings on abnormal psychology that emphasizes empirical research and factual descriptions to the exclusion of theory may taste rather dry.



The Psychology of Caste

George DeVos and Hiroshi Wagatsuma (Eds.)

Japan's Invisible Race: Caste in Culture and Personality. Berkeley and Los Angeles: University of California Press, 1966. Pp. xvii + 15. \$8.75.

Reviewed by DOUGLASS PRICE-WILLIAMS

The first editor, George De Vos, is Professor of Anthropology and of Social Welfare at the University of California, Berkeley. He is currently serving as Chairman of the Center for Japanese and Korean Studies and as director of a National Institute of Mental Health project (Comparative Research on Delinquency) in the Institute of Human Development on the Berkeley campus. He is co-author with Horace Miner of Oasis and Casbah: Algerian Culture and Personality in Change. The second Editor, Hiroshi Wagatsuma, Associate Psychologist at the Social Science Research Institute, University of Hawaii, is currently Associate Director of Comparative Research on Delinquency at the Institute of Human Development, University of California, Berkeley. He holds advanced professional degrees from the University of Michigan and the University of Tokyo. His most recent book in Japanese is Social Psychology of Ego and Self.

The reviewer, Douglass Price-Williams, is Professor of Psychology and Chairman of the department at Rice University, Houston, Texas. He has done research of a cognitive and social nature in Nigeria, Guatemala, and Mexico, much of it while he was at the University of London and is interested generally in culture and behavior—with psychology in an international setting.

mation and maintenance of social institutions have psychological concomitants and consequences. However, psychological theories that encroach on the social domain have been vigorously resisted by these disciplines. Explanation of social institutions has rested on principles of social organization, and the notion of attitudes and beliefs has been allocated to the realm of the individual psychologist. The theoretical thrust of the present book—presented by George De Vos and supported by Gerald D. Berreman in the concluding two sections—pursues the following argument. First of all the phenomenon of caste is taken out of its Indian context and defined to behave as a pattern that can be seen in other areas of the world (Chapter 14, by Berreman). Thus, the case of the Negro American is regarded as one of caste (pp. 282–283). Secondly, and central to the whole argument, a distinction is made between instrumental and expressive exploitation. This is best described in De Vos's (Chapter 17) own words: "There are societies that protectively maintain their integrity by clinging to highly emotionalized, rigid beliefs not readily amenable to change or modification. These beliefs are not instrumentally oriented but are expressive of the collective defensive psychology of the group" (p. 356). Caste is defined as a type of expressive social behavior and racism is defined as a particular form of caste ideology (p. 325). The buttressing of this viewpoint

FEW SCHOLARS in anthropology and sociology would deny that the for-

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NORMAN GARMEZY

University of Minnesota

tant concepts. In this edition there is increased attention to studies with human subjects in such areas as behavior genetics, the nervous system, learning, and motivation. Organized for maximum teaching flexibility, the book contains nearly 400 illustrations, over 150 new to this edition, including several in color. For those who wish to add further dimensions to the course, *CONTRIBUTIONS TO GENERAL PSYCHOLOGY—Selected Readings for Introductory Psychology*, is available. In addition to these readings, the complete teaching package for this text includes a Student Workbook, and an Instructor's Supplement. 3rd Ed., 1968. 756 pp., 7×10. Illus. \$9.00

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LANGDON E. LONGSTRETH

University of Southern California

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relies heavily on considerations of pollution—attitudes and behavior towards dirt and uncleanness; by consideration of ego integration and the need for institutional reinforcement; and by consideration of status anxiety in segregated societies.

Such, in very bare outline, is the theoretical argument which pervades the volume under review. While the thesis can be applied to racist ideology in India, Japan, Nazi Germany, the United States, and South Africa, the descriptive part of this book deals with Japan. In particular it deals with a group of people, apparently indistinguishable in appearance from other Japanese, who nevertheless are segregated and discriminated against. These are the Burakumin (pejoratively called by the old name of 'Eta'), who principally are found in the urban ghettos of the big Japanese cities in the south-central areas. Much of the book deals with the history and contemporary descriptive accounts of Burakumin. John Price gives a detailed historical account of the outcaste in Japan. George Totten and Hiroshi Wagatsuma deal with the political aspects of the group, particularly with the time from official emancipation of the Eta in 1871 down to the post-war period. Other authors deal with present-day ethnographic accounts of outcastes. Edward Norbeck has concerned himself with other very small minority groups, non-Eta, but similarly constituting a caste. An interesting account is given by an unknown student at the University of California at Los Angeles (given a pseudonym in the book), who shows the persistence of discrimination in that outcaste emigrants to the United States still face the same attitude from other emigrant Japanese.

THE READER could well study this book at two levels. First as a good and comprehensive study of a little known minority group; secondly as a treatise on caste from a culture and personality viewpoint. Although the authors acclaim this title, actually 'culture and personality' is becoming a misleading term. What we actually note here is a special emphasis on social and individual psychological mechanisms, that leans

as much on Piaget's notions on child development as on Freudian psychoanalysis. The psychology presented is almost exclusively at the theoretical level, leaning for its methodological content on observational material and interview material. The next logical move is to supplement this type of approach by designing a framework for supporting the various theses postulated with the appropriate methodological techniques.

The crucial theoretical point for the reviewer is whether psychological mechanisms are postulated only for the maintenance and perpetuation of caste behavior, or whether in addition they are regarded as exclusively explaining the formation of outcaste groups. The emphasis in the final part of the book, notably by De Vos but also substantially supported by Berreman, might appear to support the latter viewpoint. However, the social history and political accounts of the Burakumin that are presented in the beginning of the book belie this interpretation. It is therefore not at all clear to the reader to what extent the psychological thesis is being applied. The reason for this, one suspects, is that the concluding sections of the book move away from the particular and from one specific minority group toward a consideration of all minority groups. Thus the economic and political underpinnings of caste, in this part of the book, are under-emphasized. The crux of the matter really turns on the key definition of caste, defined again by De Vos (p. 348, note 18) as "a form of social segregation based on expressive psychological functions." Clarity would have been achieved if either the sentence had run "partly based" or "exclusively based." One feels that a psychological strand has been identified; whether it is the whole rope, or even claimed as the whole rope, is another matter. In summary, both for content and speculation this is a very useful book.



Exaggerated Inversion

John Gerassi

The Boys of Boise: Furor, Vice, and Folly in an American City.
New York: Macmillan, 1966. Pp. xviii + 328. \$5.95.

Reviewed by EVELYN HOOKER

The author, John Gerassi, is a former editor of both Time and Newsweek, and is currently a Professor of Journalism at New York University. He is author of another book, The Great Fear, concerned with revolutions in South America that was a selection of the Contemporary Affairs Book Club.

The reviewer, Evelyn Hooker, is a Research Professor at UCLA, the recipient of a Research Career Award from NIMH. She continues to work on male homosexuality and is chairman of a task force appointed by NIMH to advise the Institute concerning a research program in human sexuality with special focus on homosexuality.

A JOURNALISTIC account of a homosexual witch hunt in 1955, Gerassi's book is based on his investigation conducted ten years after the fact. His interest was aroused by a report in *Time* magazine (1955) that the city of Boise, Idaho, "had sheltered a widespread underworld that involved some of Boise's most prominent men and had preyed on hundreds of teen-age boys." The "underworld" was, in fact, not widespread: only sixteen men were arrested—although the press variously mentioned from five hundred to fourteen hundred men and teenagers. The number of teenagers was uncertain, but the "hard core," according to Gerassi, was made up of a few male prostitutes who were not so much victims as they were eager solicitors of sexual acts with adult homosexuals for "money, kicks and power."

Antiquated laws, inequitable and punitive sentences of homosexuals by the courts, and an irresponsible press that engages in rumormongering with its resultant panic, are all targets of Gerassi's damning indictment. He also denounces

the conservative mores of the radical right power elite of Boise which used and encouraged the scandal in the hope that it would "rock City Hall," then controlled by a decent reform administration, and curtail economic growth and competition, which it felt posed a threat to its power.

THE explicitly expressed purpose of the book is "the hope that there may never be reason to write another like it in any town in America." That this laudable purpose is not and could not be achieved by a single book does not diminish the merit of Gerassi's research and writing. To achieve an enlightened revision of sex laws, to educate public opinion, to guarantee a responsible press are formidable tasks. With the single exception of Illinois, American laws regulating homosexual behavior remain incredibly archaic.

As a case history of a sick town in which the mental health movement is equated with communism and tolerance or understanding of homosexuality is synonymous with both, this book is especially recommended reading for political scientists, social psychologists, and sociologists. However, there are shortcomings that seriously detract from its value. It would have profited greatly from a drastic revision. In organization it is repetitious and rambling; in style it is discursive and anecdotal and is aimed at a lay rather than a professional audience. The topics covered are very broad. As a consequence, the discussion is sometimes shallow and inadequate. This is especially true of the two chapters entitled "The Homosexual and the Analyst" and "The Gay World."

Gerassi, nevertheless, is a valuable addition to a growing list of authors who indict our punitive sex laws and plead for psychiatric treatment for those homosexuals who are a danger to society (consensual adults are excluded). Such a list would minimally include the staff of the Institute for Sex Research, members of the American Law Institute, the authors of the Wolfenden Report, Peter Wildblood, and the authors of the *UCLA Law Review*, March, 1966.

BRFLY NTD

ROBERT M. DIAMOND and JOHN C. WOODWARD. *The Amateur Psychologist's Dictionary*. New York: Arc Books, 1966. Pp. 159.

Dedicated to individuals who can not tell their panics from phobias and nymphomanias from narcissisms, this is an amusing *opusculum* but not altogether a joke. It offers a remedial, programmed instruction in terminology concerning neuroses, psychoses, and defense mechanisms, with a chapter on "miscellaneous terms" (from ambivalence to voyeurism) and a multiple-choice self-test, thrown in for a good measure. The portrait of "psychology" that emerges is distorted, that much is clear, but the volume enriched by numerous humorous drawings will have its uses, in (Introductory Psychology!) and out of the classroom.

JOSEF BROŽEK

FRANCOIS DUYCKAERTS. *La Formation du Lien Sexuel*. Brussels, Belgium: Dessart, 1964. Pp. 326.

There are very good reasons to write still another book about sexuality. The subject inherently has great merit. When a middle class, well educated Frenchman writes about it, meandering freely and elegantly from Freud via M. Mead to St. Augustine, even printed sex can become pleasurable. The author defines as his area mature psychosexual experiences of normal people, with emphasis on Freudian interpretation. His knowledge is impeccable, his French elegant and easily readable, his mood slightly sentimental. Unfortunately, the philosophizing about attraction, conflict of love and hate, caressing, and the hundred other items of loving and love-making, is of limited value and significance. It can not be applied to mankind, to west-

ern civilization, not even to French speaking people in general. It can be doubted that French or Belgian laboring classes can be included among those whose dynamics of sexuality are discussed by the author. But for those who would like to read a rather lengthy essay about bourgeois French sexuality, this is recommended reading.

IJA N. KORNER

MARGARET ELDRIDGE. Foreword by B. K. RANK. *A History of the Treatment of Speech Disorders*. Edinburgh: Livingstone, 1968. (Williams & Wilkins, U. S. Distr.) Pp. viii + 232. \$6.75.

In the somewhat related field of speech disorders, this short summarization of events and people written from a European (British) point of reference is unique in the sense that no one else has tried doing it. No evaluation of contributions is made, but the book properly concludes with a need for research in speech and speech disorders.

JOSEPH WEPMAN

PAUL R. FARNSWORTH (Ed.), MARK R. ROSENZWEIG, and JUDITH T. POLEFKA (Assoc. Eds.). *Annual Review of Psychology*. Palo Alto, Calif.: Annual Reviews, Inc., 1968. Pp. xii + 544. \$8.50.

The 1968 edition of the *Annual Review of Psychology* contains, in addition to the usual number of more or less standard topics, chapters on an unusual number of special topics. An arbitrary categorization of the 15 chapters into the two groupings will provide something of the nature of the issue. Standard topics are audition (Merle Lawrence), visual acuity (Alfred Lit), verbal learning and memory (Geoffrey

Keppel), developmental psychology (Dugal Campbell and W. R. Thompson), personality structure (Jerry S. Wiggins), psychotherapeutic processes (Rosaland Dymond Cartwright), brain functions (Mark R. Rosenzweig and Arnold L. Leiman), secondary motivational systems (Judson S. Brown and I. E. Farber), the learning of psychomotor skills (Clyde E. Noble), mass communication (Percy H. Tannenbaum and Bradley S. Greenberg), and statistical theory (William L. Hays). Distinctly more unusual topics are: computer simulation: artificial intelligence studies and their relevance to psychology (Earl Hunt), consumer analysis (Robert Perloff), psychology of men at work (Patricia Cain Smith and C. J. Cranny), and student development and counseling (Stanley J. Segal).

This year's edition continues to be well edited and indexed, in addition to having attracted the customary competent set of reviewers. The service to our discipline of this annual series remains at a high, and possibly increasing, level. One wonders, nevertheless, how much longer all of psychology can remain encompassed within the covers of a single annual volume.

MELVIN H. MARX

JOHN C. GOWAN, GEORGE D. DEMOS, and E. P. TORRANCE (Eds.) *Creativity: Its Educational Implications*. New York: Wiley, 1967. Pp. xii + 336. \$7.95, cloth; \$4.95, paper.

The 36 reprinted papers contained in this volume, together with the annotated bibliography, provide many implications for educators interested in fostering creativity in their students. Selections are provocative, informative, and wide-ranging, but the three compilers might better have differentiated for the reader opinion and hypothesis from fact and conclusion. They seem to assume that development of creativity is a straight-line growth; one does or encourages everything recommended under all conditions, in all situations, and at all ages—creativity is wonderful! Unfortunately, information is missing on how and when appropriate controls need to be learned or how one is to function with the char-

acteristics of creative behavior. There are numerous errors and omissions in citation of references and of sources.

WALLACE B. HALL

WINFRED HUBER, HERMAN PIRON, and ANTOINE VERGOTE. *La Psychoanalyse, Science de l'Homme*. Brussels, Belgium: Dessart, 1964. Pp. 305.

This book, written carefully, lucidly, and using Freud's own writing to explain his theories, consists of two parts. The first contains an exposition of the psychoanalytic logos, which may make it dated for the sophisticated reader. The second half of the book is devoted to the discussion of the relationship between Freudian Theory and the fields of psychiatry, philosophical anthropology, philosophy, psychology, and others. The authors, with fairness and erudition, argue the pro and contra of their convictions. Their task is made easier by their unconcern with post-Freudian developments of psychoanalytic thought. The source material for the discussion is drawn primarily from European authors. The book is thoroughly European in cultural flavor. The curious American reader may wonder about the future of the European version of psychoanalysis as it wrestles with other ideologies that are in the center of European intellectual preoccupations, i.e., existentialism, Marxism, neo-Catholicism, etc. It is good and enjoyable reading for those interested in European Neo-Freudism of the future.

IJA N. KORNER

ALFRED H. KATZ and JEAN SPENCER FELTON (Eds.). *Health and the Community: Readings in the Philosophy and Sciences of Public Health*. New York: Free Press; London: Collier-Macmillan, 1965. Pp. xviii + 877.

This is a book of readings in public health, designed to acquaint readers from many backgrounds with some of the major programs, achievements, issues, and still unsettled directions in this wide ranging and fast moving field. Psychologists interested in community mental health will find among the forty-five articles several of direct relevance. Most of the articles have an indirect

but nevertheless important relationship to public health-community mental health. It is recommended as a useful resource book for pertinent issues not readily available in psychological journals.

IRA ISCOE

N. N. LADYGINA-KOTS. *Predposylki Chelovecheskogo Myshleniya: Podrazhatel'noe Konstruirovaniye Obrazov i Del'mi* (Premises of Human Thinking: Imitative Construction by Chimpanzee and Children). Moscow: Nauka, 1965. Pp. 109.

This is a posthumous edition of a monograph by a noted Soviet specialist in comparative psychology. One chimpanzee and three 4-year old boys served as subjects in some 120 experiments involving tasks varying in complexity (2 to 5 elements), dimensionality (two-dimensional and three-dimensional elements), and spatial location of the elements. The subjects' behavior is carefully described, including the type of errors that were made, the number of trials needed to master a given task, and the effects of the assistance provided by the experimenter. A comprehensive theoretical framework in which the wealth of observations could be effectively fitted is lacking.

EDWARD BAKIS

JEAN MAISONNEUVE. *Psycho-Sociologie des Affinités*. Paris: Presses Universitaires de France, 1966. Pp. 545. 36 F.

The book presents a thorough discussion of the concept of affinity (attachment) with empirical data. It is concerned with the rules, processes and motivations in interpersonal relationships that fulfill two major criteria, voluntary selection that must have a positive and significant effective experience. The factors covered at the social level include: proximity, sex, age, social class; and at the psychological level, personal attraction empathy, sympathy, etc. The author presents some of his own research in this area.

VICTOR D. SANUA



JEROME K. MYERS and LEE L. BEAN. *A Decade Later: A Follow-up of Social Class and Mental Illness*. New York: Wiley, 1968. Pp. xii + 250.

As the title indicates, this is a follow-up study dealing with the relationship between social class and mental illness. It describes what happened to the patients during the 10 years following the original Hollingshead and Redlich study; i.e., treatment outcome, the probability of readmission to treatment, and adjustment in the community following treatment.

I. JAY KNOPP

R. W. PICKFORD. *Studies in Psychiatric Art: Its Psychodynamics, Therapeutic Value, and Relationship to Modern Art*. Springfield, Ill.: Thomas, 1967. Pp. x + 340. \$14.00.

This is a collection of short case studies interpreting paintings, mostly by patients, with the standard Freudian technique. The theoretical treatment is elementary and derivative, but the rich illustrative material deserves the specialist's attention.

RUDOLF ARNHEIM

ISADORE RUBIN and LESTER A. KIRKENDALL. *Sex in the Adolescent Years: New Directions in Guiding and Teaching Youth*. New York: Association Press, 1968. Pp. 223. \$4.95.

This is a sensible, hard-headed, sophisticated guide for parents and other adults who rear, counsel, or cope administratively with adolescents. The authors are sensitive and sympathetic about adolescents' sexuality, but they mince no words in describing the facts of life. Especially good is the thoughtful attention to adolescent males, whose conduct and impulses have suffered even more egregious distortions than those of females in the mythmaking of the last half century.

R. R. SEARS



MYRE SIM. (With a chapter on "Legal Aspects of Psychiatry in the U. S." by JOHN DONNELLY) *Guide to Psychiatry*. 2nd Ed. Baltimore: Williams & Wilkins, 1968. Pp. xi + 1055. \$10.50.

In this, the second edition, a chapter on forensic psychiatry in the United States by John Donnelly, MD, of the Institute of Living, has been added for the edification of American readers. Otherwise, except for minor corrections, the handbook remains essentially unchanged from what the author reports in a preface was a gratifyingly well-received first edition (the publication date of which is not revealed). The book is designed for the full array of mental health specialists who may have occasion to learn quickly a little about areas of psychiatry outside their immediate range of knowledge. The author believes his insertions of choice bibliographic references into the text will seduce even casual readers into further investigation of most topics. Psychologists will be dismayed at Dr. Sim's attempt to cover the entire subject-matter of psychology in twenty-three and one-half pages but may, perhaps, be somewhat mollified by the fact that it is the first topic in the book and occupies slightly more than 2% of the total space. The role of clinical psychologists, as contrasted with the subject-matter of their field, is never mentioned. A sampling of content under several key headings suggests that coverage is no better and no worse than other comprehensive treatments of psychiatry contained in one small volume. Consistent with the British point-of-view, the psychotherapies are seen as having a somewhat more limited application in the treatment of many disorders than is generally the case in the United States but otherwise the book is conventionally eclectic.

RALPH HEINE



Those who imitate history are condemned to be forgotten by it.

—MURRAY KEMPTON



Canadian Conference at Couchiching

Edward C. Webster (Ed.)

The Couchiching Conference on Professional Psychology. Montreal, Canada: McGill University Industrial Relations Centre, 1967. Pp. vii + 175.

Reviewed by SHERMAN ROSS

The editor, Edward C. Webster, received his PhD from McGill University and has taught at Sir George Williams College and at McGill where he is now Professor of Psychology and Director, McGill Guidance Service and of the Department of University Extension. He is author of *Guidance for the High School Pupil*, *Put Yourself to the Test*, and *Decision Making in the Employment Interview*.

The reviewer, Sherman Ross, is Scientific Affairs Officer for the American Psychological Association. His PhD in experimental psychology is from Columbia University and he has taught most recently at the University of Maryland. He has long been interested and involved in issues of development and interaction of psychology with educational and governmental affairs. He has also served as Executive Secretary of the Education and Training Board of APA.

THE Couchiching Conference of 1965 was organized and supported by the Canadian Psychological Association around the theme of psychology's responsibilities to social needs in clinics, schools, and industry. The 1967 volume is the report of the conference and its recommendations, including an Appendix which contains position papers and selected addresses.

As a U. S. psychologist, I had to improve my understanding of developments in Canada. I started with EXPO 67 as a current view of the size, scope and problems of Canada, and then worked back through some primary analyses. These included the *Survey of Canada's Psychologists* by M. H. Ap-

pley and Jean Rickwood (1967), and APA Conference on Professional Preparation of Clinical Psychologists (1966), *Notes on the History of Psychology in Canada* by C. R. Myers (1965), D. O. Hebb's *The American Revolution* (1960), and the survey of Canadian psychology by R. B. MacLeod (1955). All of these materials provided a background for the conference that permits some conclusions. The first obvious finding is the similarity between the problems of psychologists in Canada and the U. S. in the manner in which they pose and consider problems. The second feature is the growth characteristic of Canadian psychology. This growth is behind that of the U. S., but is well on its way. My last conclusion is that the U. S.-Canadian border has been a non-existent one for psychologists. One is led to believe that there really is no special Canadian psychology.

The topics covered by the discussants were the usual ones: the tensions between academic and applied psychologists, the obstacles to change, training for research activities relevant to social problems, selection and financing of students, curricular issues, relationships within the university and between the university and the community, the professional degree, non-doctoral training, the master's degree, psychological technicians, etc. A variety of programs were described representing different formulations. In general, the conference dealt with the array of concerns that have characterized the series of APA conferences from Boulder to Chicago.

While the analysis is impressive, the resolution of the problems is not especially clear. If one uses a criterion of the action outcome of the conference, it is difficult to see what will take place. Perhaps public analyses and public confessions are necessary, but should not even these be placed in the determining social context for psychology? What factors determine the future growth, the form, and interactions of psychology? How do we make and improve our contributions to social problem-solving? We should remember that sometimes disciplines, professions, and sciences grow vigorously for a while, and then may show maturity by hardening of the

arteries. These symptoms are frequently exacerbated by the self-concern of the guild, by the overt trappings of role and importance, and by territorial concerns in the university environment. The discourse at the conference was vigorous, representative, and literate.

The styling of the report is a special one. It appears to be a full and accurate account of the sequence of events of the key presentations, of the unfolding of the conference, and of its recommendations. Yet, it is a personalized record with the editor's hand shown by what he selected for inclusion as the meat of the material, and by what he cut out. In all, the technique is effective, and the report reads well. Future years will show us if any change in direction was effected by the Conference, and if our colleagues in Canada can avoid some of the U. S. pitfalls. There is no formula on which all psychologists will agree. Perhaps our unity and contributions will come from productive diversity. We look forward to a continued Canada-U. S. non-barrier, and to a vigorous, responsive development of psychology in Canada.

Experimenter into Theorist

Edmund Jacobson

Biology of Emotions: New Understanding Derived from Biological Multidisciplinary Investigation: First Electrophysiological Measurements. Springfield, Ill.: Thomas, 1967. Pp. xvii + 211. \$7.50.

Reviewed by MAGDA B. ARNOLD

The author, Edmund Jacobson, is Director of his own physiological laboratory (Laboratory for Clinical Physiol-

ogy) and of the Jacobson Clinic, both in Chicago. In a series of experiments, he has shown that mental activities are accompanied by minuscule muscle contractions related to the type of activity. He is author of *Progressive Relaxation and Anxiety and Tension Control*.

The reviewer, Magda B. Arnold, is Professor of Psychology, Loyola University, Chicago. Her PhD is from the University of Toronto and she has been interested in the field of emotion since her graduate years. She is author of a two-volume work, *Emotion and Personality*.

IN this slim volume Jacobson attempts to draw together the results of many years of physiological investigation (mainly his own), and to provide a theory to account for them.

Unfortunately, his theoretical integration depends on a few integrative concepts that do not really bring new understanding. For instance, the author proposes as the backbone of his theory the "welfare response" which includes every internal and external reaction "whenever this is normative, adaptive, or otherwise favorably functional" (p. 5). Welfare responses include voluntary effort, emotion, and reflex reactions. Indeed, "the function of emotion is to accomplish evaluation in welfare" (p. 27). Reflection is prolonged evaluation, and "anxious reflection is a familiar example of prolonged welfare response" (p. 30). Though emotions "accomplish evaluation" in the welfare response, we are told later in the book that, "although emotions in general often exhibit features of welfare response, this is not always true" (p. 193). It remains unclear whether emotions that do not promote welfare also accomplish evaluation, or why these evaluations lead to non-welfare responses.

The vast literature on emotion is treated rather cavalierly. The few theories mentioned include the James-Lange theory, Cannon's thalamic theory, Freud's theory, although all are found at least partially wanting. Marston, the lone psychologist reviewed, wins a nod because of his notion that affect accompanies all central nervous system activity, though his motor theory of emotion is not found acceptable. There is

a plethora of quotations from the writings of physiologists, neurologists, and other medical specialists, mostly used as confirmation of the author's views.

Throughout the book, the author vacillates in his definition of emotion between experiential and biological terms. He says, for instance, that the "specific function of emotion" is "a type of mental operation" (p. xv); but in another context, that "emotion is a vegetative-nervous, endocrine response more or less even of the entire nervous system to an event real or imagined, external or internal" (p. 77).

What can be gathered from the author's mixed images, cumbersome prose, and ambiguous terms seems to amount to the conviction that every kind of experience, including emotion, is "designated" and specified by neuromuscular activity. Thus "mental activities of every type are specifically localized only peripherally" so that their control can best be accomplished by muscular relaxation. "In mental activities," he says, "... there are no closed physiological circuits in the brain" (p. 95).

To support this contention, Jacobson mentions two kinds of proof: the fact that muscular relaxation results in the disappearance of mental activity; and the observation that electrical potentials from muscles can appear at the same time (or even before) electrical potential changes in the EEG over the motor area. From these observations he infers that motor action is not initiated by the brain. Rather, "mental operations are constituted by reciprocal retroactivating brain-neuromuscular patterns" (p. 103).

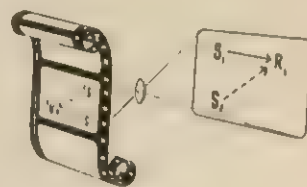
The first proof is not convincing because the very concentration on the various muscles in the attempt to "let go" and relax will effectively exclude all other mental activities. Further, all the evidence from the observation of quadriplegic patients contradicts the notion that peripheral muscle patterns are a necessary link in the circuit "constituting" mental operations. Dana (1921), for instance, reports that one of his patients who was completely paralyzed from the neck down, yet was able to think, feel emotions, and discuss her feelings. Jacobson quotes from Dana's article but never mentions these observations.

The reported fact that the electrical potential change in muscles occasionally occurs before the EEG changes over the motor cortex contradicts only a rather simplistic view of brain function according to which only cells in the motor cortex innervate peripheral muscles. A newer view assumes that the impulse to move or stop moving is initiated via the hippocampus which sends relays over midbrain and cerebellum to the periphery for background motor adjustments, and to the motor cortex for the contraction of specific muscle patterns (Arnold, 1960); this view is compatible with Jacobson's

observations. In addition, only part of the fibers in the pyramidal tract are derived from the motor cortex. Thus potential changes in the motor cortex do not necessarily indicate the exact point in time at which motor innervation is initiated.

Unfortunately, a gifted experimenter is not necessarily a good theorist. Far from supplying the principles basic to the understanding of emotions, as the jacket proclaims, the book will only confuse the reader and detract from the brilliant success of the author's experiments and his effective relaxation therapy.

INSTRUCTIONAL MEDIA



Babies: Pavlovian and Skinnerian

Learning in Infants. Produced by LEWIS P. LIPSITT, PAUL WEISBERG, and HERBERT KAYE. 16 mm., black and white, sound, approximately 28 minutes. Sale price: \$175.00; rental price: \$8.00. Rental sources: The Pennsylvania State University, Audio-Visual Services, 3 Pattee Library, University Park, Pennsylvania 16802; University of Wisconsin, Bureau of Audio-Visual Instruction, 1312 West Johnston Street, Madison, Wisconsin 53701; Boston University School of Education, Krasker Memorial Film Library, 765 Commonwealth Ave., Boston, Mass. 12215; University of North Carolina, Bureau of Audiovisual Education, 111 Abernathy Hall, Chapel Hill, North Carolina 27515; University of Minnesota, Audio-visual Education Service, 25 Westbrook Hall, Minneapolis, Minn. 55455.

Reviewed by YVONNE BRACKBILL

The three authors were all at Brown University when the film was produced. Lewis P. Lipsitt is Professor of Psychology and Director, Child Study Center there. His PhD is from the State University of Iowa, and he has conducted research on the learning and perceptual processes of human infants for the past decade. His colleague, Paul Weisberg, received a 1962 University of Maryland PhD, and is now Associate

Professor of Psychology at the University of Alabama. Herbert Kaye received his PhD from Brown and remained there for two years as Research Associate before going to Emory University where he is Assistant Professor of Psychology. He also directs an infant research program at Grady Memorial Hospital in Atlanta.

The reviewer, Yvonne Brackbill, received a Stanford PhD, has been Re-

search Associate, Laboratory of Psychology, NIMH, Professional Associate, Bio-Sciences Information Exchange, and a USPHS Research Fellow, The Johns Hopkins University. Currently she is Professor of Psychology, University of Denver, with an adjunct appointment in the Department of Psychiatry, University of Colorado Medical School.

THE FILM, *Learning in Infancy*, is a summary of much of the research that has been carried out by the experimental child psychology group at Brown University during the past decade. The film is divided into four parts: an introduction, a section on classical conditioning, one on operant conditioning, and a brief epilogue.

The introduction deals with differences between the "older" child psychology (developmental) and the "newer" child psychology (experimental). The former is identified as focusing on age differences in development and the latter on the mechanisms and processes underlying development. Enter *learning*, defined as changes in behavior that are experientially determined.

Next comes a section that is somewhat heterogeneous, though very interesting, and that culminates in an illustration of classical conditioning. The subjects throughout appear to be neonates. First, several reflexes are demonstrated: the startle, rooting and sucking, and the Babkin reflex. There is a brief description of the functions of the polygraph in recording physiological and behavioral data along with a nice illustration of what is called "habituation" ("extinction of the orienting reflex" to a Pavlovian). This is followed by the illustration of differential responsiveness to different odors and differential sucking rates to objects of different shapes (a nipple as opposed to a tube). Finally, there is a demonstration of classical conditioning using a tone as a conditional stimulus and anticipatory sucking as the conditioned response.

The third section is devoted to operant conditioning. Older infants and young children are the subjects here. There is a brief indication of procedural differences between operant and classical conditioning. (Here as elsewhere the film emphasizes operations rather than

theoretical background or practical applicability.) The operantly conditioned responses illustrated include panel pressing and lever pressing for more mature subjects, panel kicking for those who still prefer the horizontal position, and pressure exerted on a nipple via sucking for the really young ones. The reinforcers shown for these responses are various forms of visual display and nutritive substances, e.g., snacks. This section then proceeds to illustrate simple conditioning, differential reinforcement for a set of stimuli simultaneously presented, and reversal in the significance of a discriminative stimulus.

In the final section of film there is a brief demonstration of two-choice simultaneous discrimination learning in a WGTA-type apparatus. The film closes with a summary and credits.

I TAKE it that the film was intended principally for graduate students since it makes use of many undefined technical terms—particularly in the section devoted to operant conditioning. "The terminology might be too difficult for students less sophisticated in learning theory" and "Technical terms and jargon make the film unsuitable for lower division classes and of questionable suitability for any but the most sophisticated upper division students" were typical comments of Denver University graduate students who had a graduate course in the psychology of infancy. ("Those guys got a hang-up with the dictionary" was the comment of the projectionist, who had had introductory psychology.)

Among the other negative comments the students made were these: that the classical conditioning section was much more clear than the operant conditioning part and that it was unfortunate the film didn't deal with retention. (Actually, retention was touched on in the operant conditioning section.) On the whole, however, they praised the film. "It illustrates so many things a student can only read about otherwise." "It's an excellent summary of methods used in experiments with infants." "This film is helpful in illustrating a large number of applications of experimental techniques and experimental apparatus." "The first section is particularly good

in showing how reflexes are elicited and how they actually form part of a conditioning procedure."

In summary, this film is an extremely interesting presentation of laboratory methods of studying learning in infants. As such, it is a useful training device for graduate students and those undergraduates well grounded in learning theory. A look at *Learning in Infancy* is a must for anyone interested in early development.

Adventure in the Laboratory

Louis Snellgrove

Psychological Experiments and Demonstrations. New York: McGraw-Hill, 1967. Pp. xiii + 139. \$3.50.

Reviewed by GRAHAM B. BELL

The author, Louis Snellgrove, Professor of Psychology at Union University, has been identified by the reviewer, Graham B. Bell. Bell is Chairman and Professor in the Department of Psychology, Pomona College. His PhD is from Northwestern University and he has taught at Louisiana State University and spent time in India as a Fulbright Scholar and with the U. S. Educational Foundation. He also teaches in the Claremont Graduate School.

THOSE of us who have been associated with "less well advantaged" psychology departments at the college level and who have worked with high school teachers in summer institutes know Louis Snellgrove well. My own mental image of him has been as a Father Christmas-like figure who had a garage full of mimeographed material; periodically he and his group of dwarfs,

in hurricane style, ran through the garage and sent out his huge mimeographed supplements on Ideas for the Inexpensive Construction of Laboratory Equipment. I have no idea how many of his mimeographed manuals he has distributed but I am sure it is in the thousands.

Capitalizing on his experience in collecting information and ideas, and his obvious feeling for what students need to know in an introductory psychology laboratory, he has created a really fine introductory manual.

This manual is divided into three parts—statistics, experimental planning and sample experiments with descriptions of how to make or assemble the equipment for the lab exercises.

One may quarrel with minor points in the section on statistics—the frequency polygon on page 7 does not reach the abscissa, and z is used rather than t —but in 40 pages he has done an efficient and relatively complete cookbook with considerable inclusion of elementary theory. One might only wish he had included some of the new non-parametrics.

The section on experimental design is clear, carefully done, precise, and thought provoking.

The illustrative experiments are basically classics—method of limits, method of average error, reaction time, plotting of sense receptors, etc.

The book is not a text but a manual, a cookbook, a how-to document which should be extremely useful and widely used. It is an excellent adjunct to any introduction to experimental psychology laboratories, be they in high school or college.



Complete possession is proved only by giving. All you are unable to give possesses you.

—ANDRÉ GIDE



ON THE OTHER HAND



In this Department CP invites discussion of reviews and of books reviewed. Here is the place for that kind of intellectual dissent that promotes progress in understanding. Let your criticism be ad verbum, not ad hominem. Seldom does a criticism merit more than half the space of the text criticized—never more than equal space and then only when the letter is interesting and well written. CP edits letters when it thinks they should be. Single-spaced letters will be returned for double-spacing. Please send carbons.

TEEVAN DISAGREES

In his review of our last book (*Motivation*, by Richard C. Teevan and Barry D. Smith), Dr. Judson Brown made three comments that I would like to mention.

(1) That it would be difficult to determine whether it would do its job simply by inspection. This is true. It is true of any programmed or semi-programmed book and no one expects that such a determination can be made. In fact in the sample on which the material was tested, all scored above 90% on a test derived from the materials in the book and each frame was revised until its error rate was under 10%. (2) He states that, "Many of the right words could be learned by its use but the students would doubtless be left with the impression that certain conceptions of very questionable value are already verified. . . ." Any introduction to a field will be subject to this kind of criticism. We worked at making this problem as small as possible and felt that we had succeeded. Dr. Brown gives no examples. (3) Dr. Brown states that an "unusually large percentage" (com-

pared with what?) of the references came from a period before 1960. He also states that some of the later material comes from the work of "the editors and their co-workers." In the first place this book was authored—not edited. Secondly, this opens up a field that has bothered me for a long time. I have heard this criticism in many reviews. I have also seen advertisers claim—with great smugness—that most of the work referred to, or put in an edited book, is post-nineteen something or other. In an introduction to motivation it would seem to make sense that much of the primary work was done before the (magical?) date of 1960. Why is a reference to last week better than a reference to last year? Is everyone working now doing better work than Hull and Tolman did in the past? The only way such a standard might make sense is if the work in question purported to be the last word on an experimental topic.

RICHARD C. TEEVAN
University of Hawaii

MISTAKE

CP erred in the whereabouts of Donald Campbell (CP, March 1968, 13, 156.) He is still at Northwestern, not at Syracuse University. Also, Marshall Segall is spending the current academic year at Makerere University, Uganda, on leave from Syracuse

Eds.

ERRATUM

Due to an oversight of the reviewer, E. F. Borgatta's name somehow became transformed to Bogardus and the title of his article was reported incorrectly (CP, May 1968, 13, 234). The reviewer wishes to extend his most abject apologies to all parties for any insults and/or compliments that may have been paid to them because of these errors.

DANIEL LANDIS
Educational Testing Service

A Theory of Schizophrenic Symptom-Choice

Robert E. Kantor and William G. Herron

Reactive & Process Schizophrenia. Palo Alto: Science and Behavior Books, 1966. Pp. vii + 184. \$8.95.

Reviewed by LOREN J. CHAPMAN

The first author, Robert E. Kantor, is Research Associate, Mental Health Institute, Palo Alto, and Lecturer, Stanford University. He is also in private practice. His PhD is from the University of California. The second author, William G. Herron, is Associate Professor and Director of Graduate Training of School Psychology, St. John's University, and in private practice. His PhD is from Fordham.

The reviewer, Loren J. Chapman, is Professor of Psychology at the University of Wisconsin. His PhD is from Northwestern and he is best known for a series of experimental investigations of schizophrenic thought disorder. He has also published on the process-reactive distinction.

BOTH of the authors of this book have published journal articles on the process-reactive distinction in schizophrenia. In this book they have reworked and pulled together several of these articles and have written additional chapters reviewing some of the relevant research literature.

The central theme of most of the book is their theory of schizophrenic symptom-choice, a theory which superimposes the concept of schizophrenic regression on Sullivan's formulation of developmental stages of personality development in children. Sullivan postulated five stages, each of which is char-

acterized by a central problem of development which the child must master if he is to progress unimpaired to the next stage of development. Kantor and his co-authors have suggested that a schizophrenic has failed to master the developmental problem at one of these stages, regresses to that stage, and shows symptoms that reflect the problems that he failed to master. For example, in Sullivan's third stage of development, the parataxic, the central problem is crystallization of one's self-image through appropriate identification with significant others. Schizophrenic patients who regress to the parataxic stage often develop, among other things, overwhelmingly threatening world disaster delusions. The authors similarly offer lists of schizophrenic symptoms for each of the other four stages. The authors identify process schizophrenic states with Sullivan's earlier stages and reactive schizophrenic states with later ones.

Kantor and Herron's rationale for most of these predictions are perhaps overly condensed in their presentation. For example, it is not clear why delusions of world disaster follow from failure to crystallize a self-image, rather than from failure to master any of the other four developmental problems. Nevertheless the theory, as broadly conceptualized, deserves attention, considering the standing of Sullivan's views on personality as well as the popularity

of the concept of regression in psychodynamic accounts of schizophrenic symptoms.

This is a theory that should generate research. Thus far, however, the authors offer no evidence, either from clinical observation or from research, to support their predictions of symptoms. The authors present briefly one Rorschach study that they believe is related to their theory. They found, among other things, a significant relationship between a Rorschach age level score, determined from developmental norms and a composite score that reflected both the age at which the schizophrenic patient first showed personality disturbance and the age at which he was subjected to severe stresses by his family. The findings appear to be an interesting elaboration of similar findings by several other investigators.

The authors devote one chapter to urging vocational rehabilitation counselors to use the Rorschach Age Scale to separate process from reactive schizophrenics. They suggest that the scale identifies the reactive schizophrenic, who will recover and hence profit more from vocational counseling. This suggestion seems premature because the authors have not as yet reported any data on the prognostic value of their scale.

Several other chapters are devoted to a review of research literature on the process-reactive distinction, and of attempts to specify either biological or interpersonal factors that account for schizophrenic symptoms. These reviews are at times well presented but have more than the usual quota of errors and arbitrary interpretations. Many workers in the field will be surprised at the findings or views attributed to them. Some errors consist of an arbitrary coercion of the findings of a study into agreement with the authors' theory, while many others appear to reflect overly hasty reading, or carelessness in the preparation of the manuscript. Examples may be seen in their treatment of Tutko and Spence's important study of conceptual sorting by process and reactive schizophrenics and by brain damaged patients. Tutko and Spence found that process schizophrenics and brain damaged patients made more "restrictive" errors, which reflect a simple inadequacy

of response, while reactive schizophrenics made more "expansive" errors, responses that are too broad, vague, or idiosyncratic. Kantor and Herron infer from this study that the process patient, in keeping with their theory, shows regressive thought disorders, but fail to indicate that the interpretation in terms of regression is their own. Neither do they explain why they view restrictive errors as more regressive than expansive errors, nor attempt to reconcile this view with their frequent statements, made elsewhere, that regression is indicated by responses that are too broad, or vague or idiosyncratic. In addition, they erroneously cite the Tutko and Spence study as one that "indicated the similarity between the Rorschach response styles of organic patients and process schizophrenics." Tutko and Spence did not use the Rorschach.

In summary, this book touches on some provocative ideas that deserve more careful treatment than this book provides.

Mother Medea

Joseph C. Rheingold

The Mother, Anxiety, and Death: The Catastrophic Death Complex. Boston: Little, Brown, 1967. Pp. xi + 271. \$9.50.

Reviewed by IRENE FAST

The author, Joseph C. Rheingold, is associated with Harvard Medical School. He is author of *The Fear of Being a Woman: A Theory of Maternal Destructiveness*.

The reviewer, Irene Fast, is Associate Professor Department of Psychology Research Associate, Department of Psychiatry and Psychologist, Counseling Division, all at the University of Michigan. She also received her PhD there. Her interests are in bereavement, in family structure, in infantile develop-

ment of self structure, identity, and object relationships.

THE MAJOR THESIS of this book is easily stated. A "catastrophic death complex" is universal among people. It is a fear of death due to a sudden annihilation by the deliberate action of a malevolent hostile force. This fear is basic to all anxiety. Its origins in the individual lie in mothers' actual destructive behavior toward their infants.

In the elaboration of his argument, Rheingold claims to rely heavily on clinical insight. However the description of the sample of patients on which his thinking is based, the thorough delineation of the clinical material used to substantiate his argument, and the judicious use of illustration, which would permit a reader to follow such an exposition are almost entirely absent. The frequent occurrence of such expressions as "alternative hypothesis," "topographical range," "multilevel analysis," and "sample size," suggest that a rigorous analysis is being attempted, but the terms tend not to be used in any technical way and the implied careful thinking does not occur. Unsupported statements abound; morale appears in soldiers when they transmute fear into hatred; women are more preoccupied with death than men; the death of a hated person brings only satisfaction, sometimes alloyed with self reproach. The imprecision of Rheingold's conceptual thinking is such that fear, envy, and leading a creative life are all described as "attitudes"; and levels of discourse become so muddled that "the irreversible cessation of nutritional processes" and "a mechanism like a clock that gradually unwinds" are offered in the same paragraph as "explanations of death." A pervasive looseness in his use of language further increases the reader's difficulty in understanding what he means. For example, the word *death* apparently is used in other than its ordinary meaning in such a sentence as, "Death suppression is coterminous with temporal-mindedness and scientific skepticism," and sentences seem only to approach their intended meanings, e.g., "among the general variables in attitudes toward death an exogenous origin in institu-

tional concepts is regarded as motivationally unimportant."

A PART from these problems in explication, the thesis itself gradually loses clarity. Confusions in the meaning of "maternal destructiveness" provide one example of many available ones. Rheingold defines it as any influence exerted by the mother that jeopardizes the life, health, or ego of the child (p. 151). It may be entirely independent of the mother's motivation, as when the infant's life is endangered during the intrauterine period or during the birth process (p. 73). Elsewhere, however (p. 153) these biological threats are seen as not part of maternal destructiveness. And, repeatedly, beginning with the first paragraph of the Preface, it is the destructive impulses of the mother (her wish to kill or mutilate the infant) which are seen as central, though further ambiguities are introduced as Rheingold appears to assert variously that the child's perception of destructiveness is based on the mother's actual behavior motivated by sadistic impulses (p. 132), the child's misinterpretation of neutral behavior (p. 203), or the child's recognition of the mother's sadistic impulses and thoughts (p. 203). In relation to maternal destructiveness the author vigorously asserts that he is not judging mothers (p. 108) and that "maternal destructiveness" implies no maleficence (O.E.D. hurtfulness) or culpability, but both the tone and the content of the book make these disclaimers unbelievable. He speaks of being unable to "exonerate" parents (p. 81); of his own creeping sense of horror in his therapeutic practice as he recognized, "a malignant, a 'necrophilous,' a lethal quality in the mother's behavior" (p. 132); and of mother's hatred, cruelty, "minimal malignity," and sadism.

In sum, Rheingold presents a thesis relating the destructive impulses of mothers, fears of death, and anxiety, that may be of considerable interest. This book, however, does not contribute materially either to a theoretical elaboration of the argument or to a demonstration of the occurrence of the hypothesized relationships in people.

Cybernetic Approach to Human Learning

Josef Linhart

Psychologické Problémy Teorie Učení (Psychological Problems of the Theory of Learning). Prague: Publishing House of Czechoslovak Academy of Sciences, 1965. Pp. 351.

Reviewed by ONDŘEJ KONDÁŠ

The author, Josef Linhart, received his PhD in 1947 from Charles University in Prague. Subsequently he became associated with the Teachers College in Prague and, from 1959, has served as the head of the Department of Educational Psychology in the Comenius Institute of the Czechoslovak Academy of Sciences. His chief interest is in experimental and theoretical psychology of learning and mental development.

The reviewer, Ondřej Kondáš, is author of the book *Role of Learning in Psychotherapy* (page 495, this issue). He is a clinical psychologist and he is acting in the Department of Psychology, Comenius University, in Bratislava, where he lectures on clinical psychology and psychotherapy.

IN the fifties in Czechoslovakia, research in the area of human learning was neglected, except for some problems of teaching. This reflected the pattern then current in Soviet psychology, dominated by educational, practically oriented psychology. Some Czechoslovak psychologists were also concerned with conditioning and motor learning.

Since about 1960 there began to appear articles dealing with more theoretical aspects of learning. They dealt with such topics as motivation (Linhart and Michalička), mathematical models of the learning process (Břicháček), application of learning theory in psychotherapy and psychopathology (Kondáš), specific characteristics of human learning (Linhart, Pardel), discrimination learning (Soudeková), and the theory of games applied to psychological analysis

of learning (Tollingerová). At present the problems of learning are being studied intensively by Czechoslovak psychologists.

In tune with the trends of the time, Professor Linhart began, in the fifties, with research on conditioning and developed an original method for the study of orienting responses in school children (together with J. Hlavsa). Later his research effort was directed to motor learning (with M. Michalička). A classification operation (an analogue to J. S. Bruner's method) was used to study strategy in learning, and the research program was extended to include the regulative role of speech in learning, and programmed learning. The present volume presents a synthesis of this research, with emphasis on theoretical analysis.

The book's three sections deal with (1) methodological problems (20 pp.), (2) the process and the structure of learning (197 pp.), and (3) regulation in relation to learning (186 pp.).

Learning is viewed as a decisive factor in mental and personality development, the basic regulative process. In Linhart's view "during the learning process complex dynamic systems are formed in the human brain," which he considers as "the functional physiological basis of the learning structure." The theoretical approach of the author is characterized by the incorporation of some concepts of the theory of information and cybernetics. The feedback establishes, in Linhart's opinion, the functional connection between an intention of action and its final result. He differentiates between orientation and motivation afferentation. The cybernetic interpretation of the problems of learning is one of the positive contributions of the reviewed work. Linhart bases his theoretical approach also on some concepts of Skinner and Hull but he stresses the qualitative difference between human and sub-human learning. This does not mean that the general laws of learning are not valid but some of them demand modification when applied to human learning.

The synthesizing approach of the author is manifested also by the structure of the book. The descriptions of the experimental results, chiefly obtained

from 5-to-16-year old subjects, are related to thought-provoking theoretical considerations.

It may be of interest to note that conditional reflex is considered by the author not so much a simple form of learning as the most general learning mechanism. In the analysis of the process of learning the author devoted attention predominantly to the process of acquisition of responses. In this reviewer's opinion more attention needs to be directed toward the problems of extinction and changing habits, for these problems are important from the standpoint of the regulatory role of learning in human behavior. However the range of problems examined in Linhart's book is impressive.

THE reviewed book throw light on some interesting differences and similarities in the study of learning in contemporary American and Czechoslovak psychology. As in the Soviet Union, animal conditioning is regarded in Czechoslovakia as the bailiwick of the physiologist. The focus of the Czechoslovak psychologists is on human learning. Some of Hull's and Skinner's concepts are used. Motivation in human learning, attitudes, and verbal control are being studied intensively and results are applied in teaching in schools as well as in clinical psychology.

Some of the Czechoslovak psychologists are working in programmed learning and with teaching machines (Hlavsa, Milan, Linhart, Pešinová, Tollingerová). Pavlov's theory of conditioned reflexes is considered to be the physiological basis of the learning process although this view is not generally accepted. Problem solving, too, is being studied (it represents one chapter in the reviewed book) as well as paired-association learning (Maršalová, Kondáš). If one takes into account that ten or fifteen years ago the problems of learning were only a little corner of research on memory (rote learning) and of applied educational psychology, remarkable progress has been achieved in recent years, with emphasis on the fundamental problems of the theory of learning. The book under review effectively documents this trend.

Behavior Therapy in Czechoslovakia

Ondrej Kondáš

Podiel Učenia v Psychoterapii (Role of Learning in Psychotherapy). Bratislava: Publishing House of the Slovak Academy of Sciences, 1964. Pp. 234.

Reviewed by JOSEF ŠVANCARA

The author, Ondrej Kondáš, received his PhD from the Comenius University in Bratislava. He is a practising clinical psychologist but also has an appointment in the Department of Psychology, Comenius University. He has published several papers on psychotherapy, which remains his chief interest.

The reviewer, Josef Švancara, received his PhD at Masaryk (now J. E. Purkyně) University, Brno, in 1950. After 10 years of practice in clinical psychology he became associated with the Institute of Pediatric Research in Brno and the Department of Psychology, J. E. Purkyně University. He has been married for CP in the past.

IN the last decade, psychiatrists and psychologists in Czechoslovakia have argued vigorously about the participation of psychologists in psychotherapy. At the same time, some psychologists were actually engaged in psychotherapy and contributed to the literature of the subject, with emphasis on such issues as 1) assessment of the client's system of values (R. Konečný), 2) crucial significance of the contact between the therapist and the child (J. Švancara), 3) narco-analysis (A. Stančák), 4) interview with patients under stimulation of the central nervous system with benzedrine (S. Kratochvíl), 5) Schulz's autogenic training (J. Hoskovec), and 6) application of psychotherapy in gynecology (J. Čepelák), in schizophrenia (E. Syřišřová), and in enuresis (L. Ličko).

The book under review is a comprehensive, psychologically oriented treatise on psychotherapy. It is the first book in the Czech and Slovak tech-

nical literature to deal with this topic and must be regarded as eminently successful.

While psychoanalysis had been totally rejected in Czechoslovakia until recently, behavioral therapy has found favor in a climate in which Pavlovian conditioning became a household word. To Kondáš, learning is a broader concept. In comparison with classical conditioning, learning is viewed as a more complex, more highly structured, process which yields associative bonds of higher stability. Operant conditioning is viewed as an elementary form of learning. The author discusses also Eysenck's concept of surplus or deficiency of learning as a source of functional disturbances. Well versed in the theories of learning and the principles of psychotherapy, Kondáš attempts to evaluate determinants of learning, such as frequency, intensity, transfer, and interference.

THE author's conclusions are based on an extensive psychotherapeutic experience with alcoholics, schizophrenics, and neurotics. The bulk of his work has involved the application of the method of paired-associate learning in schizophrenics. In reference to his learning theory model of psychotherapy, he explored the procedures of simple and reciprocal inhibition, formation of common and idiosyncratic word combinations, and variations in the length of time between learning trials. The stability of the learned associations has served as a criterion of the effectiveness of a procedure. Psychotics differ from normals by reduced capacity for learning ("hypodiscia") and by lengthening of the process of learning ("bradydiscia").

KONDÁŠ's evaluation of behavioral therapeutic procedures is based on experience with several techniques. He applied the method of systematic desensitization by means of relaxation (J. Wolpe) in the treatment of anxiety. In the psychotherapy of stutterers, the author used successfully a modified method of negative practice. He points out that the application of psychology of learning in psychotherapy is especially useful

in monosymptomatic neuroses and in work with children with behavioral problems.

The possibility of combining the procedures of a learning therapy with conditioning therapy is regarded as an argument against psychoanalytic conceptions and procedures. However, psychoanalysis is considered only superficially in Kondáš's work. This is no wonder since the first objective, post-war biography of S. Freud, by J. Cvekl, a philosopher of science, appeared in Prague only in 1965.

Kondáš is thoroughly familiar with Soviet literature as well as the Western approaches to behavioral therapy. He has the ability to conceptualize precisely and endeavors to arrive at an original synthesis of the learning principles and procedures applied in psychotherapy. Genuine experimental spirit that permeates Kondáš's work serves as a safeguard against dogmatism, and his broad view of the human personality eliminates the danger of excessive simplification and mechanization of therapeutic procedures.

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Collective Voting Behavior

Angus Campbell, Philip E. Converse, Warren E. Miller, and Donald L. Stokes

Elections and the Political Order. New York: Wiley, 1966. Pp. ix + 385.

Reviewed by DAVID O. SEARS

All four authors are on the staff of the Survey Research Center at the University of Michigan. Angus Campbell, Stanford PhD, is Professor of Psychology and Sociology and Director of the Survey Research Center. Philip E. Converse, Michigan PhD, is Professor of Sociology and Political Science. Warren E. Miller is Professor of Political Science. He has a Syracuse DDS. Donald E. Stokes, Yale PhD, is Professor of Political Science. As Green Bay is to professional football, so Ann Arbor is to voting research, due principally to these four men.

The reviewer, David O. Sears, has a 1961 Yale PhD from the Attitude Change program. Since then he has taught social psychology at UCLA. This past year he has been Visiting Lecturer in Social Psychology at Harvard's Department of Social Relations. He is co-author with Lane of Public Opinion and wrote the chapter on political behavior in the new Handbook of Social Psychology.

THE two overriding aims of research on voting behavior are to account for variations in individual votes and in electoral outcomes. Angus Campbell and his colleagues took up the first question in 1960 in their now-classic *The American Voter*. Now this volume, according to the book jacket, "emphasizes the col-

lective processes of politics and shifts the attention from the voter to the full electorate and from individual choice to collective decision." The primary data base is several national surveys done by the Survey Research Center between 1952 and 1962. The power of the analysis is enhanced by the fact that many measures were repeated in each survey; some of the data also comes from a panel sample reinterviewed at two-year intervals.

The volume itself is a collection of fifteen papers, all but two of which had been published elsewhere between 1960 and 1963. No very strenuous effort is made to integrate the papers; indeed few changes have been made from the original journal versions. They do not describe a single framework, contrary to previous volumes, but are the product of four agile and extremely well informed minds moving ahead on the more subtle and challenging problems of political behavior. Previous volumes were jointly authored, whereas here the chapters are individually signed. It is literally an indispensable collection for any scholar of voting behavior, though *The American Voter* remains the single most complete and coherent account of the individual voting act.

The most salient themes in the earlier analysis were that party identification tends to be a lifelong commitment of

premier importance in the vote decision, and that abstract ideology is an uncommon thing in the general public. Here the authors begin to analyze the implications of these observations for electoral outcomes. The central concept is introduced in Converse's chapter on the "normal vote." Any subgroup's "normal vote" may be predicted from the distribution of party preferences within that group, because defection and turnout rates are predictable from party identification.

All else being equal, then, presidential elections currently should go to the Democrats by a 54-46 margin; the larger number of Democrats offsets their weaker party identification, and consequently their greater tendency to defect or not to vote. Things are usually not equal: "short-term forces" usually work to the advantage of one side or the other: differential candidate appeal, policy issues, variable salience and relevance of group membership (e.g., religion in 1960), and so on. Converse's data suggest they influence the voter's decision as a U-shaped function of his exposure to campaign information. The "tuned-in" voter, normally a strong partisan, rarely defects from his party regardless of circumstance. The zero-information individual likewise is a constant partisan, seeing no reason to switch (this is a less trivial instance than might be thought. In 1958, for example, 46% of the voters in contested districts had not "read or heard something" about either congressional candidate). The slightly informed voters switch around most, usually having only superficial acquaintance with the campaign from occasional television exposures.

Which "short-term forces" are electorally most decisive? Unfortunately,

the most important answer is omitted from this collection. Stokes, in a 1966 journal article using these same data, showed that affects toward the candidates varied much more widely over the four most recent presidential campaigns than did attitudes on domestic issues, parties, etc., in terms of the net benefit to one side or the other. This points to candidate "images" as the single most powerful determinants of defections from the "normal vote" division in the electorate; only a disastrous Democrat, or a charismatic Republican, can normally overcome the Democratic advantage in party preference.

Perhaps the most important void in the present analysis, therefore, is any very good account of which inputs are critical in determining attraction to a candidate. The main effort is Converse's and Dupeux's analysis of Eisenhower and deGaulle as "popular heroes." Their argument is that military hero candidates have been responsible for the most dramatic defections from "normal vote" expectations. Their analysis of French and American data is not satisfying though, appealing finally to such milquetoasty descriptive terms as "generalized worship" and "vague, affective attraction." While in the generals' cases this may indeed represent an "effortless generalization from military virtues to 'virtue,'" it does not account for the origins of variations in candidate images of the far more numerous *non*-military men, unless one wishes to assume that heroism in the service of Knute Rockne, the Fighting Irish, and Warner Brothers transfers effortlessly to political virtue.

A second possibility is raised by Stokes's brief discussion of "valence issues." These are issues that are either all good or all bad, like motherhood, corruption, or Communism. They are contrasted with such "position issues," as fair housing or medicare, on which genuine policy alternatives exist. Stokes suggests that campaigns are decided primarily on the basis of valence issues much more often than is commonly recognized, but does nothing empirically with the notion.

This inability to deal with political inputs to the individual is chronic though scarcely crippling in the work of

the SRC. Their analyses invariably deal much more successfully with interrelationships among the voter's several attitudes than with the external stimulus factors that generate them. The painful fact is that the empirical social scientist knows little about what is critical in determining a candidate's "image." The absence here of any analysis of the 1964 election, with Goldwater's dramatically repellent "image," is particularly unfortunate from this point of view. Was he mistrusted because of his impulsive personality, or because of his ultra-conservative political philosophy and the policy positions it led him to take? Or was it his reputation for being on the wrong side of such valence issues as nuclear war and social security? How was it possible to cripple him so dramatically as a candidate?

Despite some such murkinesses, explanations of variations in electoral outcome now seem inevitably to focus on the minimally informed voter's candidate images. This draws the empirically-minded social scientist closer to those intellectuals who become hysterical at the mention of politically activist advertising agencies or public relations firms. In his last book, *The Responsible Electorate*, the late V. O. Key argued ("perversely," he said) that "the voter is not a fool." Campbell and his colleagues here again emphasize the perversity of that argument.

This conclusion ought to come as quite a shock to social psychologists. The earlier voting studies emphasized the causal role of demographic variables and of party identification, both highly stable over time, in producing individual vote decisions. Changing the focus of attention from the individual voter to the election's outcome has also changed it from the most common type of voter, the constant year-in and year-out partisan, to that comparative rarity, the defector. And after being reassured for many years that the party system prevented radical changes or irresponsible responses to momentary whims, it is now disconcerting to find attention focusing upon candidate images, valence issues, and upon a "swing voter" who is among the most poorly informed of voters.

Several chapters are primarily devoted to broadening the scope of the authors' previous analyses. Three present comparative data from Norway and France, each an interesting case because party differences there are more closely tied to policy differences than is the case in this country. Problems of current practical political interest are considered in several others. Converse offers an excellent analysis of the impact of religion in the 1960 election. He estimates, finally, that the issue cost Kennedy 16% of the popular vote in the South, and 2% in the nation as a whole, despite helping him in Northern cities. He also considers the possibility of accelerating defection of Southerners from the Democratic party, but concludes that currently the differences between North and South are only slowly diminishing. He notes that an important contingency is the Republican racial position; the trend could be accelerated considerably by a racist Republican party in the South.

A particularly fruitful avenue of future research is opened by Campbell, Stokes, and Miller in analyses of congressional races. The well-known off-year loss of congressional seats by the presidential party is explained not as a rejection of the President and his program, but as a reduction in turnout of those "peripheral" voters that swung most with the wind to the leading presidential candidate, and who tend to vote only in presidential elections. The off-year voter is more likely to be the hardy partisan voting his party line. Hence the off-year outcome is considerably less volatile than presidential outcomes. These obviously represent only a beginning in a rich future of comparisons between nations or types of election, especially non-partisan elections or primaries, and elections for lesser offices.

THIS WORK clearly represents the most comprehensive and sophisticated research currently being done on voting behavior. It is indispensable for anyone concerned with voting. Moreover, access to the SRC data through the Inter-university Consortium has already begun to pay off in secondary analyses by scholars and doctoral candidates at other universities. Yet one must feel

uneasy at the growing tendency to rest generalizations about all features of voting behavior upon this single data base. The SRC technique is in many ways quite idiosyncratic: the specific policy questions used are a little esoteric; much of the important data is based upon open-ended questions offered at the beginning of the interview (with consequent losses due to the greater difficulty of recapitulating the reasons for one's political attitudes than of responding coherently to fixed-alternative questions); and in general only na-

tional issues are considered. The idiosyncratic organization of a single individual's attitudes (no matter how reasonable), or highly systematic variance due to local situations, thus wash out as error. The answer to such problems is of course to supplement rather than to ignore the SRC data. The need for other such ambitious and large-scale programs of research on political behavior cannot be overemphasized. When the purse-strings for such programs are finally loosened, there will be an impressive model to live up to.

thought, and then generalizes his conclusions to the nature of reality itself.

As in his earlier works, Piaget organizes his thinking around the tripartite dialectic argument so as to impart a formal clarity and harmony to his writing rarely encountered in philosophic—to say nothing of scientific—exposition. By means of the dialectic paradigm, he systematically integrates material from cybernetics, genetics, embryology, invertebrate zoology, genetic psychology, and other bio-sciences in conjunction with propositions and theories from logic, mathematics, and epistemology. Using the relationship between organism and milieu as a constant point of departure, he constructs sets of ingeniously articulated dialectic parallels out of the historical development, and the functional interactions of the content and theories of these sciences. This enables him to achieve conceptual unification of his widely ranging subject matter while furthering the development of his thesis, and to do both with aplomb.

And, as in his earlier works, Piaget continues to do dialectic battle with the theoreticians of either side and at all levels of the problem of innate versus acquired characteristics. Thus again he inculcates—and repeatedly scolds—empiricists, mechanists, and associationists, represented by such standard-bearers as Lamarck, the logical positivists, and the S-R learning theorists, on the one hand; and apriorists, vitalists, and idealists of which neo-Darwinians, Gestaltists, and K. Lorenz are cited as some of the archetypes on the other; for holding logically antithetical positions each of which is only partially true. Piaget resolves their impasse with his “tertium” hypothesis that represents a middle, synthesizing position: In its relationship with the environment, the organism is conceived of as neither subjugated by nor independent of external influences, but as both product and creator of its milieu by virtue of the ongoing, organized, and self-regulatory interactions between organism and environment that constitute life itself.

AGREEMENT with Piaget's logical exposition and conclusions requires the

Beyond Human Understanding

Jean Piaget

Biologie et Connaissance: Essai sur les Relations entre les Régulations Organiques et les Processus Cognitifs. Paris: Editions Gallimard, 1967. Pp. 430. 21,40 F.

Reviewed by MURIEL D. LEZAK

Jean Piaget is well known to CP readers.

The reviewer, Muriel Lezak, says she was interested in epistemological questions at the University of Chicago where she received a PhD in general studies and an AM in human development. Her PhD in clinical psychology is from the University of Portland. She is now Clinical Psychologist in the Psychology Service, VA Hospital, Portland, and Assistant Clinical Professor of Neurology at the University of Oregon Medical School. She has spent some time in a community clinic setting, taught for two years at Portland State College and has been in general independent practice. She has an ABEPP in clinical psychology.

WITH this generously conceived essay on the nature of knowledge, Professor Piaget culminates a half-cen-

tury of inquiry in which he has increasingly gone beyond the confines of empirical science to grapple with ultimate questions of the validity of knowledge and the nature of reality. Piaget's explicit goal is to demonstrate his thesis that “the cognitive functions constitute a regulatory organ governing the interactions between environment and organism, and that the essential operations of this organ are inherent in and characteristic of the fundamental life processes.”

The epistemological ramifications of this thesis are his central concern. By means of a series of logical *tours de force* demonstrating the biological bases of logic and mathematics, Piaget offers proof of the natural necessity, evolutionary inevitability, unique and universal applicability, and—by inference—unquestionable superiority of the logico-mathematical systems of western

Significant Titles

BIOLOGICAL FOUNDATIONS OF EMOTION

Research and Commentary

Edited by ERNST GELLHORN
Emeritus Professor,
University of Minnesota

Six significant research articles investigating the physiology and psychology of emotion are collected in this text. Major discoveries and developments in the area of emotion are explained from research perspectives in psychology, neurophysiology, and endocrinology, providing a meaningful synthesis and interpretation of the physiological bases of emotional processes. Each research article is followed by a commentary written by the original author or the volume editor; these comments and discussions, representing the author's latest thoughts on the physiological bases of emotion, relate the context within which the research developed, explain the significance of the research, and discuss new developments that have occurred since publication of the original article. In summarizing and integrating the investigation, Professor Gellhorn presents a synthesis of the various approaches to emotion discussed in the preceding sections of the text, with additional experimental and clinical findings, to arrive at an overall theoretical conception of the physiological substrate of emotion. Scott, Foresman Physiological Psychology Series. Just published. 160 pages, illus., softbound, \$2.95

A PRIMER OF OPERANT CONDITIONING

By G. S. REYNOLDS

University of California, San Diego

Concisely organized and outstanding in its introductory coverage, this text offers an authoritative exposition of basic and advanced concepts, principles, and facts of learning, performance, and memory as presented from the point of view of operant conditioning. The material advances from simple and basic acquisition and inheritance of behavior, through the maintenance of performance, to complex considerations in avoidance, emotion, and motivation. 1968, 160 pages, illus., \$3.75

SCOTT, FORESMAN AND COMPANY College Division

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acceptance of a number of assumptions such as the following:

(1) That the classical Western systems of logic and mathematics constitute the necessary and sufficient methodology for all valid theoretical science.

(2) That all other systems of organizing knowledge and experience represent stages of arrested development along a unidimensional-unidirectional continuum of cognitive maturation of which today's complex logico-mathematical systems comprise the highest and perhaps the ultimate stage.

(3) That abstraction of a concept permits a supposition of "conceptualizability" of the *cogito ergo sum* variety. Certain of these abstractions are treated by Piaget as if they were susceptible of universal consensual validation independent of acculturation. For instance, the concepts of structure and function are dealt with not as merely useful or culturally conditioned abstractions that, in the last analysis, must be distinguished arbitrarily, but as self-sufficient entities that conform to the real nature of things, author their own consequences, and have an integrity, a purpose, and a permanent place in the scheme of things.

(4) Underlying all of Piaget's assumptions is the most fundamental form of projection: the assumption that his culturally and linguistically conditioned construction of the world is natural and therefore necessary. From this apperceptive bias flows, so naturally as to seem unperceived by him, his choice of logical argument in the classical Western tradition as his chief tool for organizing knowledge. The usefulness and power of this tool is brilliantly illustrated by Piaget's rigorously disciplined and boldly creative handling of his material as he makes his systematic conceptual progression to his fundamental conclusion. Acceptance of Piaget's assumptions and logical development leads to exhilarating consequences: nothing less than an airtight logical demonstration that there is a reality out there to which our experience conforms. In short, Piaget propounds a once and for all solution to the problem of validating human experience.

Although the thesis of this essay has to do with establishing the essential

biological nature of cognitive operations, this is not a psychological treatise nor—in the broadest sense—need it have been written by a psychologist. Piaget is quick to point out that he is writing primarily as an epistemologist whose training and experience happen to have been in genetic psychology and zoology. He anticipates his readership will be drawn at least from both branches of his intellectual heritage with the expressed hope that this book may contribute to a fruitful rapprochement between these two life sciences.

There are obvious benefits to be gained from a study of this volume. Certainly informational enrichment is one, of which the lucid illumination into the basic principles of genetics as they relate to living systems in general, the review of theoretical issues in contemporary genetics, or the survey of ethology today are prominent examples. Piaget's theoretical illumination may not command acceptance, but it will demand consideration in future attempts at large-scale biosocial and epistemological theory-making. And in the richly elaborative and systematically meticulous development of his material, Piaget has generated a wealth of germinal ideas.

But, for a psychologist perhaps the most exciting reward to be gained from reading *Biologie et connaissance* is an acquaintance with the workings of a magnificent intellect. Taken in a psychological context as a mental product, this book reveals the mind of its creator as a rare example of 'rational intelligence' in full flower. One can only hope that the fluency, clarity, and harmony that characterize Piaget's thought and expression will be preserved in translation.



(Analytic geometry), far more than any of his metaphysical speculations, immortalized the name of Descartes, and constitutes the greatest single step ever made in the progress of the exact sciences.

—JOHN STUART MILL



480 x 52 - Good Reading

Ithiel de Sola Pool, Robert P. Abelson, and Samuel L. Popkin

Candidates, Issues, and Strategies: A Computer Simulation of the 1960 and 1964 Presidential Elections. Cambridge, Mass.: M. I. T. Press, 1965. Pp. xii + 193. \$2.45

Reviewed by JOHN C. LOEHLIN

Ithiel de Sola Pool, the first author, is Professor of Political Science, M. I. T. The second author, Robert P. Abelson, is Professor of Psychology at Yale University. The third author, Samuel L. Popkin, is Research Assistant in the Department of Economics and Social Science, M. I. T.

The reviewer, John C. Loehlin, is Associate Professor of Psychology and of Computer Sciences, The University of Texas at Austin. His PhD is from Berkeley and he has taught at the University of Nebraska. He is author of Computer Models of Personality, recently published by Random House.

NOT every research project in the social sciences becomes the subject of a popular novel, as this one did (Eugene Burdick's *The 480*). Nor, for that matter, do most of us hand in our research reports to the likes of Chester Bowles and Robert Kennedy. *Candidates, Issues, and Strategies* is an account of such a project, a computer simulation of the 1960 Kennedy-Nixon presidential election. The simulation was undertaken for the Democratic Party in 1959-1960, with the proviso that the basic data tabulations would be available to the Republican Party if they chose to use them (they didn't), and that the results would be published in full after the election. A second simulation, of the Johnson-Goldwater election, was undertaken in 1964 under purely academic auspices.

The source of data was 65 national surveys made by U. S. polling organizations between 1952 and 1960: a total of some 130,000 interviews. The 130,000 respondents were grouped into 480 "voter types," by such criteria as sex, religion, socio-economic status, geographic region, and political affiliation. Survey questions in turn were clustered to yield 52 composite variables, mostly representing attitudes toward particular candidates or issues, but also including such matters as voting turnout. The basic data were thus the attitudes of the 480 voter types on each of the issue variables.

The actual simulations employed much less than the full data matrix. The 1960 election prediction used only three variables: previous voting, turnout, and attitude toward Catholicism. The predictive equations were based on four assumptions: (1) Protestant Republicans would vote in 1960 as they had in 1956; (2) Democrats and Independents with stated anti-Catholic attitudes would vote for Nixon; (3) about one-third of the Catholics voting Republican in 1956 would switch to Kennedy; and (4) voters under conflicting pressures would show reduced turnout. The "simulation" was simply a matter of applying the appropriate equation to each of the 480 voter types, and then making state-by-state predictions from the frequencies of voter types in each state.

The predictions turned out to be in reasonably good agreement with actual

votes cast—the median absolute error in predicting state votes was around 3 or 4 per cent. In addition, the results agreed well with election-time poll estimates of the vote by sex, religion, urban versus rural residence, race, and socio-economic status.

After-the-fact explorations with the model suggested that predictions which did not include the religious issue were uniformly poor; that the simulation was not highly sensitive to the exact value of the Republican Catholic shift to Kennedy—fairly good fits were obtained with values from .3 to as high as .7; and that if the campaign had turned on foreign policy Kennedy would probably have lost.

The procedure for the simulation of the Johnson-Goldwater election of 1964 was much the same, except that three campaign issues were used in addition to previous vote and turnout: civil rights, nuclear responsibility, and social welfare. The prediction proved to be about as accurate as in 1960, although the election was a very different one—the state-by-state results of the two elections were actually negatively correlated.

POOL, ABELSON, AND POPKIN go to some pains to disclaim magic powers for their method. It is clear that its success in election prediction depends on guessing right as to which issues will affect the voters. Its potential usefulness to a candidate lies in telling him which issues it will be profitable for him to play up or play down in his campaign. Its chief advantage as a theoretical tool lies in the possibility of exploring the consequences of assumptions. For example, take the assumption that voters under conflicting pressure (such as Republican Catholics in 1960) tend to stay home on election day. The authors included such a mechanism in their model; indeed it was their only really *psychological* assumption. They found that it made a difference in the accuracy of the simulation all right: the prediction improved when they took it out. The moral for psychology will be left to the biases of the reader. In any event, computer simulation allows one to introduce various assumptions into the model and

follow out their implications for the detailed pattern of votes cast. And this should make it a useful tool for the student of candidates, issues, and strategies on the U. S. political scene for some time to come.

The over-all flow of the book seems a little choppy, due partly, no doubt, to different hands at work on different sections. On the average, though, the writing is very readable and with a little judicious skipping the book can be slid through quite painlessly by the non-specialist.

In short, worth reading and not hard to do.

American Psycholinguistics in Germany

Hans Hörmann

Psychologie der Sprache. Berlin, Heidelberg, New York: Springer, 1967. Pp. xi + 395. \$14.50.

Reviewed by ERIC H. LENNEBERG

The author, Hans Hörmann, is Professor of Psychology and Director of the Psychologisches Institut of the Free University of Berlin. He received his PhD from Göttingen University and came to Berlin in 1960. He is working on problems of the cognitive system—principles, STM, influence of noise on information processing. He is author of *Konflikt und Entscheidung*.

The reviewer, Eric H. Lenneberg, was born in Germany, and went through the primary grades there. He received secondary educational training in Rio de Janeiro, and came to the United States for his higher education, receiving a PhD in 1956 in psychology and linguistics from Harvard University. He then spent two years at Harvard Medi-

cal School on a post-doctoral fellowship and a further two years as resident fellow at Massachusetts General Hospital. He has taught at M. I. T., Harvard Medical School, Harvard University, and the University of Michigan; he is now Professor of Psychology and Neurobiology at Cornell University. He is author of *New Directions in the Study of Language and Biological Foundations of Language*.

WHEN any of us, here in America, attempts to survey his field in a book, it turns invariably into a text for college students. When our German colleagues do the same it becomes a learned handbook. Perhaps this is due to the excellent but sober format adopted by an academic press such as Springer, but I believe it goes beyond this. Hörmann's splendid book illustrates the point. It shows the dispassionate attitude of a collector—the love of bringing together every detail, none more precious than any other, organizing the whole into a well-indexed catalogue that gives the peruser a guideline for his understanding of both the historical underpinnings and the variety of the contemporary array. The items that have been collected here are articles or thoughts concerning the psychology of language.

This is a complete survey of the field, the point of view and breadth of interest being somewhat akin to those of George A. Miller in this country. In fact, it could serve as a continuation of Miller's *Language and Communication* (1951), which, as its author is well aware, is by now badly out of date.

The book begins with an attempt to delimit the field and define the major problems covered by a psychology of language; then there is a survey of the largely philosophical aspects of symbols, signs, and expressions. Here, as throughout the book, the bulk of the source material comes from the English-speaking world or draws on those continental sources that have been translated into English and are fairly well known in this country. In some chapters, however, as in the second, German authorities that have fallen into oblivion here are referred to or briefly discussed.

This not only adds variety to the diet, but is interesting for our perspective of intellectual history. For instance, we find C. Buehler being added to S. Langer, a special service, since Buehler's *Sprachtheorie* makes difficult reading even to native Germans. Most chapters, such as the third one, on straightforward accounts of material, is easily accessible to us over here. And that is, therefore, common knowledge to most of us. An example is Hörmann's discussion of formal linguistics, which ranges from de Saussure and the field to Chomsky. Only scanty reference is made to ongoing controversies in this connection or elsewhere, but the different points of view are acknowledged. These are usually presented in a dialectic, with first the thesis, then the antithesis, and finally a synthesis, so that the innocent reader may get the impression of a calm and steady evolution of thoughts in which every advantage points are attained. The true of the chapters dealing with information theory (including the theory of speech perception—the section in this instance is not complete) and the various statistical approaches to language structure.

AN introduction to associationist psychology bears the (for an unusual title) "Phenomenology of Associations"; it includes discussions of Galton and Marbe and finishes up with a critical evaluation of C. Jung. Another chapter is again a straightforward account of American trends in verbal behavior research from the associationist point of view.

Four chapters are devoted to the problem of meaning. The first of these presents the philosophical background, especially demonstrating to the German reader the importance of C. S. Peirce and C. Morris; the second gives an account of the predominantly German approach to the problem as represented by Trier and Porzig (a somewhat Gestalt-oriented point of view, where the context is seen as the meaning-determining figure) and relates these views to those of J. Deese; mediation theories of Mowrer and Osgood are presented in some detail in the third chapter; and the fourth deals with the pros and cons

of treating meaning as the result of a conditioning procedure.

A chapter on sound symbolism reviews work that is again quite familiar to the American psychologist; another, on the recent trend of testing "the psychological reality" of grammar, is based largely upon the concepts incorporated in Chomsky's generative grammar. A chapter on language development and one on the Whorf hypothesis conclude the work.

This is a scholarly presentation of the present state of American psycholinguistics. Those of us who judge new books by the number of references to

ourselves will have a field day; we will find our views accurately reproduced and stated in a German prose that is almost astonishingly concise.

In many ways the book is an ideal compilation. It lacks the heaviness of the five-volume compendium by Kainz on the same subject, and it is more scholarly than would be a book intended primarily for classroom use. At present there is nothing in English that serves the same purpose as this monograph. But unfortunately it makes no sense to plan a translation, since over three quarters of this work is based on publications that appeared in English.

in predicting susceptibility. However, Hilgard's zeal for theory and his inclination for encompassing and evaluative reviews are well reflected in this book.

The first section is an introduction to the central theme—hypnotic susceptibility. This issue is dealt with in the broad context of historical reviews and theoretical analysis of the nature of the hypnotic state and the role of induction procedures. One chapter is devoted to the important issue of hypnotic after-effects, although unrelated to susceptibility. It has probably been included for the didactic purpose of guiding beginning investigators. The introductory part conveys two major ideas: the distinctiveness of the hypnotic state following certain induction procedures and the stability of hypnotic susceptibility viewed as a personality disposition, which is correlated with suggestibility in the waking state but not identical with it. The importance of induction is demonstrated throughout the book by a special method. This method is strongly recommended as the critical way to examine differences in performance following suggestions in both hypnotic and waking states. While no theoretical clarification is offered for the significance of hypnotic induction, occasional references are made to psychoanalytic notions of transference, without, however, systematic elaboration. Actually, the simplicity (and occasional mechanization) of the Stanford induction procedures tend to minimize transference.

Two parts of the book present a detailed theoretical discussion and an account of experimental investigations and psychometric analyses of the susceptibility scales. Several merits of the scales are listed, i.e., the availability of equivalent scales and standard norms, simple procedures minimizing threat in subjects and hypnotist, and the possibility of assessing various aspects of susceptibility. Two additional contributions may be mentioned. One is the careful and many-sided clarification of each item, a rather rare feature in psychological scale analysis. Another is the analysis of the factorial structure of three scales. In each of these, Hilgard found a major factor accompanied by several smaller factors. He believes that in spite of the imperfect content similarity

Respectable Hypnosis

Ernest R. Hilgard with a chapter by Josephine Hilgard

Hypnotic Susceptibility. New York: Harcourt, Brace & World, 1965. Pp. xiii + 434. \$9.50.

Reviewed by ABRAM S. MINKOWICH

The author, Ernest Hilgard, a Yale PhD, is Professor of Psychology at Stanford University. He has long been interested in hypnosis and is author or co-author of some 30 research reports on the subject. He is also co-author with Gordon Bower of *Theories of Learning*. Professor Hilgard is a former president of the APA and recipient of the Distinguished Scientist Award. Josephine Hilgard, his wife, also a Yale PhD with an MD from Stanford, is Clinical Professor of Psychiatry at Stanford.

The reviewer, Abram S. Minkowich, is Senior Lecturer at the Hebrew University of Jerusalem. He teaches and experiments in personality, developmental, and educational psychology. His PhD is from Michigan where he also served as a research associate and instructor. His project on risk-taking, personality, and perceptual styles done

under a grant from the U. S. Air Force, will appear shortly in book-form.

HYPNOSIS, until recent years viewed by many psychologists as a bizarre, almost untouchable area, has become in the last decades a respectable topic for scientific investigation. The fact that a prominent psychologist like Hilgard, with his reputation as an "Arbiter Elegantie" in learning theory, has dedicated nearly a decade to the study of hypnosis is both a reflection of the new attitude toward the field and an event reinforcing its legitimacy.

The book, basically, is a presentation of empirical studies concerned with psychometric analysis of the five Stanford hypnotic susceptibility scales, experiments to determine construct validity of scale items, and correlational studies of personality and developmental factors

all three major factors represent a general factor of hypnotic susceptibility. An attempt to define this factor by specific contents will, in Hilgard's opinion, be misleading. He prefers to describe it in the more general terms of inhibition and primary suggestibility. A strong case for the stability of such a factor, however, might be made by obtaining greater content similarity in the major factor from responses of two different samples to a given scale.

A more successful approach for investigating personality and developmental factors in hypnotic susceptibility followed upon the discouragement with the results of numerous personality inventories, projective techniques, and behavioral tests. Hilgard and his collaborators came to see susceptibility as both an attitude and an ability to engage in regressive, imaginative adventure. In the attempt to predict susceptibility, they, therefore, turned to an examination of the subjects' attitudes toward hypnosis, socialization and experiences, parental identifications, and involvements in adventurous and imaginative activity in everyday life. Particularly noteworthy is the clinical method introduced by Josephine Hilgard to assess the nature and degree of involvement in reading, dramatic arts, and other similar activities. The insights gained vindicate her approach as a fruitful starting point. However, since her predictions were not better than those obtained from life experience questionnaires, it might be more practical in the future to transform the clinical interviews into standard questionnaires. A rather puzzling finding that needs theoretical clarification is what the Stanford group calls "The alternative paths to hypnosis," i.e., the fact that susceptibility is not an algebraic resultant of several factors but is rather determined by a single favorable or unfavorable factor.

Hilgard offers an eclectic semi-formalized theory of hypnotic susceptibility with a strong emphasis on developmental factors. Notwithstanding his reluctance to define the nature of hypnosis itself, he describes its characteristics and suggests three explanatory concepts—primary suggestibility, inhibition, and

dissociation—without, however, attempting to integrate them. He rejects sceptical views that describe hypnosis as mere simulation, role enactment or simple suggestibility, and insists on the distinctiveness of the hypnotic state. However, he advises caution, because "hypnosis lends itself to extreme statements, and those who claim too much for hypnosis are its scientific enemies as much as those who claim too little."

In summary, Hilgard pulls hypnosis out of the sphere of the mysterious by demonstrating continuity with waking state behavior and by simplifying induction procedures. At the same time, he zealously recommends granting hypnosis a niche of its own—that of imaginative and adventurous regression.

From Romanticism to Reality

John M. Reisman

The Development of Clinical Psychology. New York, N. Y.: Appleton-Century-Crofts, 1966. Pp. ix + 374. \$3.95.

Reviewed by JOHN M. HADLEY

The author, John M. Reisman, is Chief Psychologist, Rochester Child Guidance Clinic and a Clinical Associate at the University of Rochester. He received his PhD from Michigan State University in 1958 and has been at Rochester since 1959.

The reviewer, John M. Hadley, has been Director of Graduate Training in Clinical and Counseling Psychology at Purdue University for 21 years and Interim Head of the Department of Psychology for four years. This sentence will be served after June 30, 1968, and he expects to devote his full time to research in the areas of his current interests in the education of pre-profes-

sional mental health workers and the concept of the health-engendering personality. He is the author of *Clinical and Counseling Psychology*. He received his PhD from the University of Iowa in 1939.

THIS fantastically thorough volume attempts to trace the development of clinical psychology from Rousseau (man is basically good) to Truman (anti-intellectualism).

The book consists of 11 chapters. The first is appropriately entitled "Roots." This chapter has headings entitled "A beginning," "Impetus within literature for reform," "The political push for reform," "The influence of science in producing reforms," "Four individuals who effected reforms," and "An appraisal." The remaining seven chapters are concerned with specific time intervals: "The hopeful psychology, 1800-1899," "Early triumphs, 1900-1910," "Psychologists go to war, 1910-1920," "School rivalry, 1920-1940," "Shared values, 1930-1939," "Victors, 1940-1949," and "Questions, doubts, and responsibility, 1950-1960." The sub-headings in all of these chapters are the same. They are as follows: "Normal personality functioning," "Diagnostic formulations," "Treatment formulations," and "Professional development."

As the above suggests, this is a very interesting and readable book, written in excellent journalistic style. Although it purports to trace the history of clinical psychology (or so the author says in the first few pages) it is well titled. It does trace the development of clinical psychology and does a remarkable job of illustrating the interfaces of this development with politics, literature, philosophy, general psychology, and psychiatry.

The book is filled with anecdotes and glimpses into the personal life of many individuals who have had an impact on psychology and clinical psychology in particular.

The book should be read by every student of psychology. The principal shortcoming is that it is not adequately referenced. The serious student or

scholar who might want to go to an original source would be frustrated. There is not a single source given for any of the titillating quotes or provocative statements. Each chapter has a long bibliography, but it would be a monumental task to find the source of most of the author's comments.

The book contains more names and facts than the reviewer has ever seen crammed into 374 pages. As indicated, it is also readable, yet in spite of the clever scheme of organization, it does

jump around quite a bit. The reader will have difficulty bridging the gap between the significance, for example, of the ruthlessness of Hitler, the significance of the death of Freud's mother, and the marital unhappiness of Melanie Klein. These are all discussed within a span of three pages.

However, there probably are meaningful relationships between most of the discrete events and the serious reader can certainly absorb many facts in an extremely painless manner.

concept formation based on Hull-Spence formulations. Martin proposes a theory of concept formation based upon the classic excitation-inhibition model, one that relies heavily on the construct of inhibition. In addition to functional analysis and S-R approaches, an approach based on assumptions about a rational learner playing a game against an indifferent opponent is described by Hunt, whereas Gregg emphasizes the importance of the character of the internal representations employed by the subject. Computer simulation approaches are described and their limitations are carefully noted by Murdock. Similarly, information processing approaches receive their due, especially from Peterson who proposes a generate-test model with an "editor" inserted between the presentation of a stimulus and the occurrence of an overt response. Unfortunately, there is less of a comparison between these approaches than would have been desirable except for the historical survey by Murdock and the summary comments by Newell and Simon.

Conceptual Diversity

Benjamin Kleinmuntz (Ed.)

Concepts and the Structure of Memory. New York: Wiley, 1967. Pp. xiv + 286.

Reviewed by HENRY C. ELLIS

The editor, Benjamin Kleinmuntz, is Professor of Psychology, Carnegie Mellon University. His book, *Personality Measurement: An Introduction*, is reviewed on page 517 of this issue.

The reviewer, Henry C. Ellis, received a 1958 PhD under James Vanderplas at Washington University. He is at present Professor of Psychology at the University of New Mexico, where he has been since 1957. His principal interests are in human learning and perception, with particular interests in processes involved in transfer, stimulus pre-differentiation, and perceptual learning.

THIS is the report of the Second Annual Symposium on Cognition held at the Carnegie Institute of Technology during April 1966. The general purpose of this series is to concentrate selectively on some area subsumed under the topic of cognition, with emphasis in 1966 being directed toward the topic of concept attainment and the structure

of memory. The format of the symposium is fairly standard: a discussion is provided for the major papers and an overview of the principal issues is given in a summary paper.

The heterogeneous character of both conceptual and methodological approaches to problems in concept attainment and memory is clearly reflected in the symposium. The reader is provided with a rich panorama of diversity, including divergences in both research tactics and in theoretical formulations of conceptual behavior. On the one hand, a functional task-analysis of conceptual behavior characterizes the approach of Bourne, whose principal concern is with rule-learning. Bourne's interest is primarily with how human subjects learn rules, where rules refer to the various classes of operations described in a taxonomy earlier proposed by Hunt. In striking contrast to the functional analysis of conceptual behavior, Martin presents an analysis of

Not only is there a diversity in the conceptual formulations employed, but there is also considerable variance in the manner by which the participants use the notion of concept. For Bourne, concepts are to be inferred from the classification of stimulus objects in accordance with experimenter-defined rules. In the case of rule learning, the task of the subject is to discover the rule when given the attributes; that is, the experimenter identifies the stimulus attributes and requires the subject to determine how they are related. Rule learning is distinguished from attribute identification, which requires the subject to classify properties of stimuli on the basis of a rule given by the experimenter. A critique of Bourne's treatment is given by Holland who seriously questions the ecological validity of Bourne's approach to concept formation. In contrast to both Bourne and Hunt, Martin views a concept as a set of mutually induced response tendencies, a definition that is derived from a set of quite formal assumptions about behavior. The critical feature of Martin's definition is that the organism must

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learn to inhibit one set of responses while simultaneously making another set of responses, and it is this very feature to which Holland objects, based on Terrace's findings regarding errorless discrimination learning. If the emphasis on inhibition is ignored, then Martin's and Holland's views of concept formation reduce to that of stimulus control.

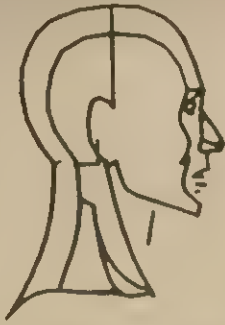
The relationship between conceptual behavior and memory is also treated in a variety of ways. In some instances virtually no discussion of memory is made, whereas in other papers, notably those of Hunt, Gregg, Peterson, and Cofer, considerable effort is made to explore this relationship. For example, Cofer explores the relationship between the conceptual organization of material and immediate free recall and concludes that conceptual factors are unimportant in the recall of correct items. That this is not always the case is, of course, recognized. Moreover, Cofer demonstrates that the effect of categories appear to be the result of inter-item associations rather than some "higher-order" processing of cognitive events.

In this connection, the contrast between the approaches of Peterson and Cofer is immediately recognized by Melton. He reviews with pleasure the approach of Cofer, which is consistent with associationistic thinking, whereas Peterson's emphasis on editing processes serves as a warning or alerting signal for Melton. This contrast serves also to illustrate that S-R and cognitive approaches to memory and conceptual behavior are still working toward rapprochement. Whether formulations derived from S-R theory emphasizing implicit events will satisfy those theorists with a cognitive viewpoint, and the manner that such a presumed rapprochement may take, remains to be seen. From an S-R viewpoint, "cognitive processes" have been handled via the Hullian construct of the pure-stimulus act and related constructs that were developed following this conception. The use of implicit events such as response-produced cues and perceptual mediating responses attests to the fact that the world of external stimuli and overt responses are not perfectly correlated. Despite this effort on the part of S-R theorists to deal with implicit events,

others such as Newell and Simon favor an information-processing approach to the study of conceptual behavior in contrast to S-R approaches.

UNFORTUNATELY, the symposium provides us with no full opportunity to see how these various approaches may even tentatively converge. Although we are presented with an impressive array of papers, it would have been useful to have some kind of comparison between S-R and information-processing approaches, especially with respect to the kinds of theoretical constructs employed. A valuable adjunct to the symposium would have been a summary of the informal discussion among the participants and audience that occurred on the last day of the conference. Murdock's effective discussion provides us with some comparisons; however, a presentation of the highlights of the discussion by the entire group would have contributed much to the volume.

Despite this limitation, the volume will be a valuable resource for those who are doing research on conceptual behavior, as well as for those who wish to observe from the sidelines. Martin's paper will give readers an excellent illustration of the use of formal S-R theory applied to the manner in which concepts are formed. Regardless of the reader's viewpoint, this paper stands as a major substantive contribution to the literature on concept formation and deserves careful consideration by all concerned with theory construction. Gregg's paper is valuable because of its attempt to deal with sequential concepts, and Hunt's paper is impressive. Peterson's analysis of search processes in memory and paired-associates learning is similarly impressive, despite the limitations seen by Melton, and Cofer provides a valuable and integrated picture of his research program dealing with the effects of conceptual organization on free recall. An adjunct paper is provided by Nodine who presents a summary of the role of temporal variables in concept formation. There is no doubt that this symposium will serve as an important reference source and as a source of research ideas for a considerable period of time.



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1966 6 x 9½ 407 pp.

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The Trammels of Freedom

Jack W. Brehm

A Theory of Psychological Reactance. New York: Academic Press, 1966, Pp. x + 135. \$5.75.

Reviewed by ROBERT C. ZILLER

The author, Jack W. Brehm, is Professor of Psychology, Duke University. He received his PhD from Minnesota in 1955 and taught at Yale University before moving to Duke. He and A. R. Cohen are the authors of *Explorations in Cognitive Dissonance*, Wiley, 1962.

The reviewer, Robert C. Ziller, is Professor of Psychology, University of Oregon. He received his PhD at the University of Michigan, studied group decision making in Washington, D. C., Colorado, Nevada, and Texas, with the Crew Research Laboratory, United States Air Force; studied open-closed groups at the Center for Research on Social Behavior, University of Delaware, and is currently studying self-other orientations, social trust, and interpersonal and intergroup conflict.

AN OBSERVATION suggests an experiment and there follows a series of 14 experiments and an evolving theoretical framework. The crucial concern in this familiar sequence of investigation is that point in time where theory crystallizes and the investigation becomes focused. Delayed theory development may be associated with a romantic quest in infinite vernal regions. Premature closure may be associated with a pyramid in the desert. Those in search of "reactance" risk the latter fate, although they may yet direct themselves toward a more fruitful and familiar region. First, however, they must free themselves from the trammels of "freedom."

In this research monograph it is postulated that when a person's freedom to act is restricted, he will react by attempting to regain his freedom. For example, when told by one's wife that a meeting of her club at your home requires that you play golf (your favorite sport) that day, the restriction of freedom evokes a reappraisal of the value of golf in comparison with other possible activities such as television, and the perceived value of television increases.

The fundamental construct of the theory of reactance is "freedom." "For behaviors to be free, 'the individual must have the relevant physical and psychological abilities to engage in them, and he must know, by experience, by general custom, or by formal agreement, that he may engage in them.' The paradigm calls for the removal of one of a set of choices and the subsequent evaluation of the entire set of alternatives with particular interest in the alternative removed from the choice field.

Freedom is restricted (or coercion is effected) by such means as reporting that one of the objects of choice was not delivered on time, having the choice made by someone other than the subject, having a confederate co-subject violate the directions and suggest a joint choice, creating conditions where a confederate indicates a choice by sending a note reading, "I prefer 1-A" or "I think we should both do 1-A." In another study, a previous subject is reported as saying, "He" (meaning the

subject) "can't choose anything else." Again, a partner obligates a subject by performing a service. Freedom of choice is assumed to be restricted when pieces of candy to be selected are placed at various distances from the subject or by giving a subject in a free market money to buy a given kind of advertised bread, or under a questionnaire situation where the opinions of a student from another college are displayed and the experimenter says, "We assure you will be greatly influenced by the opinions stated, and that your response this time will tend toward the opinion of this student." Finally, under opinion questionnaire conditions, the subject was read a statement by the peer which ended with the following: "You as college students, must inevitably draw the same conclusion."

THE BROAD category width of the term "freedom" may permit the inclusion of these operations as freedom restrictions, but this only attests to the elasticity of the concept and plague the development of the framework beyond this point. Furthermore, even though the freedom is invariably removed by someone, there is no attempt to inquire as to the perception of this person. If the other person insists upon a given alternative, a negative emotion may be induced (Levy, D. M., 1961). Emotional syndromes and oppositional behavior, in Hock, P. H. & Zubin, J. (Ed.) *Psychopathology of Childhood*, Grune and Stratton, 1955). The perceived relative power of the other person also suggests itself as a variable.

Other existing constructs also seem relevant. The possible suspicions of the subjects must be considered or, using a less reactance generating language, should be considered. Degree of identification with the person responsible for freedom restriction or coercion may also be entertained as a construct in the interpretation.

The manipulations involved in the experiments may also be perceived as leading to a categorization of the subject by another person or by circumstances without providing an opportunity for self definition or self guidance. Again the term "freedom" may apply

but it also introduces a wide variety of noisy associations.

The familiar psychological framework concerning the self concept is perhaps the most conspicuously omitted orientation. All manipulations pose threats to the self guidance system with its mechanisms for consistency and predictability. Under reactance stimulus conditions the other persons or circumstances are generally opposing. The ensuing minor conflict evokes negative behavior expressed in terms of elevating the evaluation of the removed alternative.

REACTANCE THEORY as it now stands is a para-word theory removed by one or more positions from normative social-psychological language. Perhaps such a stance is invited when research begins with an observation of a paradox. A broad spectrum of interpretations are possible and the choice of framework is subject to a wide variety of forces, including the connotations of the words involved and the proclivity for novelty. In its present form, the reactance framework must be viewed as an initial categorization step in the long process of theory formulation. Associations with existing theory have not been thoroughly explored to date.

The author indicates repeatedly that alternative explorations are possible, but maintains that the present framework has the advantage of having predicted the "obtained negative effects of compliance" (p. 90). Indeed, throughout the author is to be commended for an unusual display of caution. The book begins with a cautious statement of purpose (. . . "The purpose of the monograph is to propose one such explanation along with relevant experimental evidence" p. v). The book ends with a page entitled "A Word of Caution" in which it is stated, "Although there are many published reports of studies which might easily be explained in terms of reactance theory, other theories offer at least as adequate an explanation" (p. 129). The modesty of the investigator is best demonstrated on pages 14 and 15 where at least three statements may be found indicating the factors that complicate the testing of the theory. The alternative explanations are rarely pre-

sented, however, thereby avoiding a confrontation of reactance theory. The identity of reactance theory is preserved through isolation rather than developed through comparison processes.

The introduction of the theory at the outset of a book or research program may represent a somewhat rigid if not a defiant posture. The serial order of theory followed by research suggests a set that is not amenable to compromise and may encourage tortuous analyses of the data. In examining a phenomenon, the presentation of theory at the outset without a reformulation in the final chapter suggests a declamation rather than a dialogue.

The model for the approach of this monograph is Stanley Schachter's *The Psychology of Affiliation*, (Stanford University Press, 1959). In this series of studies, the reader is party to theory search and is present at the denouement of the theory in the last section. Such a sequence is also an invitation to the reader to test the inchoate theory and assist in its reformulation. On the other hand, when the theory is presented at the outset and no attempt is made to modify it, the freedom of the reader may be restricted, leading to reactance.

Nevertheless "reactance" research explores an apparently significant phenomenon, and the monograph is undoubtedly a model for a series that displays the current research efforts of a research team or a single investigator. A new media of research communication is represented here that should be especially helpful in upper division courses and in graduate education. Through monographs such as these a student may deduce the thinking of a major investigator. For example, the original order of the studies may be determined from their publication dates. It is hoped, however, that the introduction of miniature size books will not invite premature closure in research programs.



To describe happiness is to diminish it.

—PAVESE



The Very Model

Weiant Wathen-Dunn (Ed.)

Models for the Perception of Speech and Visual Form. Cambridge, Mass.: The M.I.T. Press, 1967. Pp. x + 470. \$10.00.

Reviewed by CARL E. SHERRICK

The editor, Weiant Wathen-Dunn, is Chief, Speech Research Branch, Data Sciences Laboratory, Air Force Cambridge Research Laboratories, Bedford, Mass. He has an MA in Physics from Wesleyan University, studied at Munich, Maryland, and M.I.T., and has worked as a physicist on problems of sound and speech for the U. S. government since 1941.

The reviewer, Carl E. Sherrick, is Research Psychologist and Lecturer, Princeton University. His status, interests, competence, and aspirations, he says, remain unchanged since the November 1967 issue of CP (p. 529).

CERTAIN problem areas, like some color pairs and some musical notes, are dissonant when presented together, and speech and visual form perception ought to stand high on anyone's list of polar opposites in a semantic analysis. The papers contained in the present volume by Wathen-Dunn suggest that such a conclusion results from a superficial inspection of the manifest content of the two fields. The secret of a successful blending of the two lies in the word 'model.' Nearly every paper is devoted to the promulgation, criticism, or testing of one or more models of the perceptual processes involved in either speech or visual form recognition.

The volume is a collection of all papers presented at a symposium held under the auspices of the Data Science Laboratory of the Air Force Cambridge Research Laboratories. Fifty-three papers, thirty-eight by Americans and fifteen by foreign visitors, each with literature references, make up the bulk of the volume.

The papers range in character from a two-page note on a case of visual alexia to a highly mathematical analysis of



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certain aspects of speech recognition. Many points of departure of an empirical or rational sort between these extremes are represented, providing for experienced workers an aliquot portion of current research and theory in the mainstream of perception

ONE or two papers deserve mention for the insight they afford into the model-making process. The invited paper of MacKay may well serve as illustrative of the *Zeitgeist* theory of ideas for some future historian. MacKay's suggestions for model-makers and testers are strongly reminiscent of Gibson's insistence in *The Senses Considered as Perceptual Systems* that the dynamic interplay of sensory and effector functions (if regression to a dualist view of the nervous system is permitted) is the core of the perceptual process. A number of papers that follow echo this theme for speech, form, and space perception

The paper by Licklider describes a young field of endeavor—dynamic modeling, in which complex perceptual processes may be simulated by programs on computers that present to the modeler a pictorial display of the scene. Unlike the older simulation programs. In a sense, the ingenious model maker can see motion picture reproductions of events he could not hope to photograph *in vivo*. Dynamic modeling thus applies to theory construction the very principles that Gibson and MacKay have underscored for perception!

The form and substance of the present volume recalls an earlier book edited by Walter Rosenblith, titled *Sensory Communication*. That book, also the result of a symposium, covered more canvas with a bigger brush. The participants made longer presentations on a wider variety of topics that they had explored systematically over a long period of time. The Wathen-Dunn book stands in relations to the Rosenblith work as James's *Briefer Course* stands to his *Principles*. If the former pair survive the fickle romance between Nature and Theory, the first member may affectionately be called 'Wally.'

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Autonomic Regulation

A New Evaluation

Ernst Gellhorn

Principles of Autonomic-Somatic Integrations: Physiological Basis and Psychological and Clinical Implications. Minneapolis: University of Minnesota Press, 1967. Pp. xiii + 318. \$10.00.

Reviewed by LAWRENCE I. O'KELLY

The author, Ernst Gellhorn, is Professor Emeritus of Neurophysiology at the University of Minnesota. He has for many years maintained an active interest in the physiology of autonomic functions and has written extensively.

The reviewer, Lawrence I. O'Kelly, is Professor of Psychology at the University of Illinois. His major research interest is in the physiological basis of motivation, with particular concentration on water regulation.

IN the preface to one of his books, Ernst Gellhorn said: "If the material and the ideas presented in this book should inspire any young men and women to dedicate their lives to the furtherance of the neurological sciences, the writer would consider his labors to have been not in vain. Approaching the evening of his life, he realizes, more than ever before, that not personal achievement or success, and still less, power, is an aim worthy of a scholar, but only untiring devotion to the science of his own choosing." The book was *Physiological Foundations of Neurology and Psychiatry*, and the date was 1953. In this long twilight Professor Gellhorn has written three more books and has listed in the bibliography of the book under review 24 experimental, theoretical, and review articles with dates after

1953! Perhaps more than any other physiological investigator, he has made the autonomic nervous system his province; his authority has been almost unquestioned since the publication of his monumental review, *Autonomic Regulations*, in 1943. His research contributions have been as wide-ranging as the autonomic system itself, going from basic physiological processes to clinical and behavioral aspects of his subject, and always with an underlying organismic point of view. In the preface of *Autonomic-Somatic Integrations*, he remarks that "our journals and books provide evidence that a major part of present neurophysiological work attempts to elucidate the function of smaller and smaller units (single neurons and their constituent parts). These important studies need to be supplemented by the analysis of organismic functions that was inaugurated by the fundamental experiments of Claude Bernard, Pavlov, J. Barcroft and Walter B. Cannon." It is to this purpose that Gellhorn's present contribution is addressed.

"Autonomic" means *independent*, but while it is true that autonomically innervated organs will maintain function after their connection with the central nervous system has been interrupted, in the intact animal such organs are very much under the influence of the central

nervous system, at all levels from cerebral cortex to spinal cord. Indeed, a consideration of the contrasting functions of the parasympathetic and sympathetic divisions of the autonomic nervous system, as Gellhorn points out, makes such a conclusion inescapable. The parasympathetic system is most concerned with "restitution of cellular functions through anabolic processes, reduction in activity, and increase in blood supply and gastrointestinal functions." The sympathetic system "creates favorable conditions for the maximal performance of the somatic nervous system through cardiovascular adjustments, rise in blood sugar, delay in fatigue, etc." Gellhorn adopts W. R. Hess's designations of trophotropic and ergotropic functions for the parasympathetically and sympathetically mediated functions respectively. These systems, when considered as broadly as Gellhorn does in this book, must include excitatory and inhibitory cerebral systems, their control of cortical excitability and of peripheral autonomic and somatic functions, their reciprocal relations, their modifiability by drugs and through reflexes and as a result of cortical excitation, and the parallelism between upward and downward changes in a variety of conditions."

THE general anabolic character of the trophotropic system and the energy-releasing features of the ergotropic system have been known for a long time and have been extensively described by Cannon, Hess, Ransom, Gellhorn, and many others. What is more novel is Gellhorn's exploration of the relationships between these systems and their central neural controls in sleep and waking, in conditioning, in experimental neurosis and anxiety, and in a host of other behavioral manifestations. The argument is amply buttressed by a bibliography of 1,018 citations plus an appendix of 59 additional research items added while the book was in proof. Essential to his general thesis is the assertion that the two systems are reciprocally related, "even partial elimination of one system (releasing) the antagonistic system," and that "ergotropic and trophotropic symptoms are sharply separated under most

physiological conditions and do not appear in a mixed form at the same time." The clearest separation of ergotropic and trophotropic dominance is between the alert state, characterized by "a generalized sympathetic discharge, increased tone of muscles and cortical desynchronization," and the sleeping state, "associated with parasympathetic discharges, a lessened sympathetic tone, cortical synchronization and loss of muscle tone." Degree of alertness is determined by the state of balance between the central excitatory system, "consisting chiefly of the ascending facilitatory system of Magoun, the posterior hypothalamus, certain parts of the limbic system, and the intralaminar nuclei of the thalamus," and the inhibitory system, "comprising a portion of the medulla oblongata, the anterior hypothalamus, septum and caudate nucleus, and anatomically related structures." While admitting that the anatomical evidence is not particularly certain, he feels that the basis for a functional inference of two distinct systems of neurons is compelling.

Just as degree of alertness is affected by an "ergotropic/trophotropic quotient," so, Gellhorn argues, is acquisition of conditioned responses, the rate being accelerated when the quotient increases and slowed when the quotient decreases. "The increased emotionality during conditioning, the effects of lesions and stimulation of the hypothalamus on c.r., the reciprocal relation existing between orienting reaction and c.r. reflected in reciprocal relations between potentials in reticular formation and hypothalamus under the influence of spreading depression, and the hypothalamically induced facilitation of evoked sensory cortical potentials are but a few of the arguments which favor the hypothesis that an increased hypothalamic activity is essential for the establishment of c.r." The ergotropic-trophotropic system probably does not act directly on the engram-forming process, but rather serves to modulate the neural flow upon which conditioning depends.

EXPERIMENTAL NEUROSIS, in Gellhorn's view, may be an extension and exaggeration of the ergotropic domi-

nance necessary for establishment and maintenance of the conditioned response. All of the procedures used to produce experimental neurosis involve excessive excitation of the ergotropic system, leading to a "breakdown in the reciprocity of the relations which exist under physiological conditions between the ergotropic and trophotropic systems in general and the ergotropic and trophotropic divisions of the hypothalamic system in particular." Under these circumstances excitation spreads from the ergotropic to the trophotropic system, the simultaneous discharges from these antagonistic systems being responsible for the behavioral disturbances of the neurosis. Gellhorn extends this hypothesis to account for differences between normal fear and clinical anxiety. In fear, the system balance shifts towards the trophotropic side, and reciprocity of the systems is preserved, whereas in anxiety it is characterized by intense ergotropic excitation that spreads to involve the trophotropic system, with loss of normal reciprocity. Consequently, fear is reducible by increased ergotropic activity, but anxiety is relieved only when ergotropic activity is first reduced.

Space does not permit more than mention of other important areas of autonomic involvement considered by Gellhorn. Reticulo-somatic interactions in convulsive seizures, emotional expression, and pain are given a chapter, as are the functions of the central autonomic systems in conflict, stress, and neurohumoral release. The book ends with a brief discussion of further behavioral implications, particularly with respect to the significance of evidence from intracranial self-stimulation studies for Gellhorn's position. He suggests that the physiological processes in self-stimulation are similar to those in conditioning, and that "self-stimulation involves at least two processes, a trophotropic excitation (and pleasure) and an ergotropic excitation leading to increased general activity." The increased activity insures increasing rates of response and probably facilitates association of the bar-response with situational sensory cues.

This, then, is the book—a mature organization of the evidence for interaction of autonomic and somatic neural

systems. Gellhorn has continued his great service to students of behavior by this essay. It should serve as a stimulus to renewed research interest in the area of autonomic influences on behavior. It is to be hoped that Gellhorn's twilight inspires more similar contributions.

A Feast of Famine

Helmut Thomä. Translated by Gillian Brydone

Anorexia Nervosa. New York: International Universities Press, 1967. Pp. 342. \$8.50.

Reviewed by JOHN NEMIAH

The author, Helmut Thomä, is Professor and Chairman of the Department of Psychotherapy at Ulm University. He did his psychiatric training at Heidelberg University with a year at Yale on a Fulbright Fellowship. He completed psychoanalytic training, including a year at Tavistock Clinic. He was Psychiatrist-in-Chief of the Psychosomatic Clinic in Heidelberg from 1956 until going to Ulm.

The reviewer, John C. Nemiah is Psychiatrist-in-Chief at Beth Israel Hospital and Professor of Psychiatry, Harvard Medical School. He has spent most of his professional life in Boston as a psychoanalyst and educator, with a major interest in medical student teaching and psychosomatic medicine. He is author of Foundations of Psychopathology.

IT is nearly a hundred years since Heinrich Hoffman presented to the juvenile readers of *Struwwelpeter* an early case of anorexia nervosa in the story of little Kaspar, who would not have any soup and died a rapid death of

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his willful fast. Now, again, the German literature has produced a treatise on the same disorder that, if it is longer and more scholarly, is in many ways as graphic and compelling as its nineteenth century predecessor.

Thomä's *Anorexia Nervosa* was originally published in German in 1964 and is now made available to English readers in an excellent translation by Gillian Brydone. It resembles other monographs on the subject in form only. After a survey of historical and modern works, the author summarizes the clinical information derived from thirty patients examined at the Heidelberg University Psychiatric Hospital between 1950 and 1959. There follows the longest section of the book, devoted to a detailed presentation of the treatment of five patients, and the volume concludes with a thoughtful chapter on the theoretical implications of the clinical findings, particularly with regard to the psychogenetic and psychosomatic aspects of the syndrome.

WHAT sets this work apart from others on the subject is the richness of its content, especially that concerning the details of treatment of those patients who underwent psychotherapy. The author considers anorexia nervosa a distinct syndrome distinguishable from "all other illnesses that result in emaciation and loss of weight" by several specific criteria: "(1) The age of onset is usually puberty or postpuberty; (2) the patients are almost all female; (3) the reduction in nutritional intake is psychically determined; (4) spontaneous or self-induced vomiting occurs, usually in secret; (5) amenorrhea usually appears either before or, more rarely, after the beginning of the weight loss; (6) constipation, sometimes an excuse for excessive consumption of laxatives, speeds up the loss of weight; (7) the physical effects of undernourishment are present." At the same time that he argues for the clinical distinctness of the syndrome, the author emphasizes the heterogeneity of the associated psychopathology. "Anorexia nervosa patients," he writes, "exhibit . . . a hodge podge of character traits. . . . It is possible to find a completely ran-

dom assortment of phobic, obsessive, depressive, and hypochondriacal symptoms among them."

In contrast to the many authors who have either been nihilistic about the efficacy of treatment or have in a perfunctory way played variations on the therapeutic theme first presented by Gull, Dr. Thomä has a major interest in the psychotherapy of patients with anorexia. Of the thirty cases in his series, fourteen had from 11 to 120 hours of individual therapy, and five underwent psychoanalysis; the remaining eleven "refused treatment." It is, of course, notoriously difficult to assess the results of psychotherapy, and Dr. Thomä devotes a lengthy and thoughtful section to this problem as it bears on the patients in his series. Although some untreated cases recovered, and some failed to improve with extensive therapy, only one died, and he concludes that "those who received psychotherapy have by far the best prospects for recovery." As a further check on his findings, he compares his series with that of Kay and Leigh from Maudsley, the patients of which clinically matched his own, but were generally treated by other than psychotherapeutic measures. "This comparison," the author reports, "shows a definite advantage for systematic psychotherapy based on psychoanalytic research."

THE LONGEST, and perhaps the most interesting and valuable section of the book is devoted to the detailed presentation of material from the treatment of five patients, three of whom were analyzed. Anyone who has attempted to work with patients suffering from anorexia nervosa is familiar with the extreme difficulty of penetrating their aloof, monosyllabic behavior to the inner mental life that lies behind, and it is a tribute to Dr. Thomä's skill as a therapist that he could establish a relationship with his patients in which they would reveal to him the wealth of fantasies and feelings rioting behind the facade. It becomes abundantly clear that like clinical psychopathology, the underlying psychodynamic processes range over the widest spectrum of drives, emotions and defenses. His findings pro-

vide a stringent caveat to those who would oversimplify the etiology of this disorder.

In his final chapter Dr. Thomä turns his attention to some of the practical and theoretical issues concerning cause and cure that are raised by the phenomena of the syndrome. A section on "Existential Analysis and Anorexia Nervosa" may seem unduly long. American psychiatric ears untuned to that more European melody, however, provides an unmistakably pertinent critique of a psychological approach that characterizes many of our colleagues abroad. What will appear striking by its absence to readers on this side of the ocean is the lack of any consideration of the "borderline character," who, as reflected in their primitive wishes and drives, and their marked disturbances in identifications with resulting ego defects, would seem to be the psychological thread upon which most of these patients might be strung.

It is probably carping to complain about the absence of an index in a volume otherwise so rich and full of excellent things. And yet it is just this richness that makes the reader regret the lack when he wishes to consult the specific aspect of the author's findings or ideas without having to search through all the wealth of detail. Perhaps the author will add an index to the next edition, and if the book is as successful as it deserves to be, one will be called for soon.



Leibnitz's discoveries lay in the direction in which all modern progress in science lies, in establishing order, symmetry, and harmony, i.e., comprehensiveness and perspicuity,—rather than in dealing with single problems, in the solution of which followers soon attained greater dexterity than himself.

-J. T. MERZ



Measurement—or Assessment?

Benjamin Kleinmuntz

Personality Measurement: An Introduction. Homewood, Ill.: Dorsey, 1967. Pp. xiii + 463. \$7.00.

Reviewed by S. STANSFELD SARGENT

The author, Benjamin Kleinmuntz, is Associate Professor of Psychology at Carnegie-Mellon University. His 1958 PhD is from the University of Minnesota and he spent a year as clinical psychologist in the University of Nebraska Health Service before going to Carnegie. He is author of *Problem Solving: Research, Methods, and Theory* and of the forthcoming *Clinical Information Processing by Computers*.

The reviewer, S. Stansfeld Sargent, received his PhD from Columbia University and taught there before moving in 1955 to Arizona and entering clinical psychology. He is co-editor of *Culture and Personality* and co-author of *Social Psychology*, and a paperback, *Basic Teachings of the Great Psychologists*. During year 1966-67 he was Professor of Psychology on World Campus Afloat.

WITH the increasing number of personality tests and issues associated with them, a textbook dealing exclusively with the important area of personality measurement is badly needed. Kleinmuntz's *Personality Measurement* fulfills this need by "presenting a balanced compilation of the major personality measurement procedures. . . . It is believed that this is the only book which collects the subject matter in one volume: until now, teachers have had to send students to various tests and

measurement texts and assign the personality test section." So reads an ad by the publisher, as to the *raison d'être* of the present volume, and it seems relatively free of exaggeration.

The author has indeed produced a lively and up-to-date textbook that will introduce the student to both the established and the controversial aspects of personality measurement. He makes clear that he omits discussion of the testing of abilities, aptitudes, attitudes, interests, and values. Nor does he give much attention to personality theory, recommending supplementary reading in the volumes by Hall and Lindzey or by Bischof. His style is clear and readable. He uses many illustrations, and tables, to summarize the high spots. Each chapter has a brief annotated list of further readings. A comprehensive bibliography almost fifty pages long is provided with the author and subject indexes.

Perhaps the approach of Kleinmuntz is best shown not so much in his discussion of the nature of measurement and the attributes of psychological tests as in his chapter on "Technical and Ethical Problems of Personality Measurement." Here he contrasts the "descriptive" with the "dynamic" conceptualizations of personality (Allport, Eysenck, Cattell, Guilford vs. the depth- and psychoanalytically-oriented psychologists). He con-

cludes that "the major difference between the two seems to be in the extent to which the descriptivists are heavily committed to measurement, almost to the exclusion of theorizing about their measurement goals, and the extent to which the proponents of depth approaches overemphasize theory and ignore measurement. Part of the problem, to be sure, is due to the fact that dynamic personality constructs do not easily lend themselves to measurement and that descriptive approaches tend to defy theorization" (p. 59). He is aware of the special difficulties involved in personality as compared with ability testing in regard to instructions, test conditions, representative sampling, and "the probabilistic nature of personality indices"—e.g., time and situational variation in mood or response.

As to ethics, Kleinmuntz describes the 1965 Congressional inquiry into testing, taking up specifically the criticisms made by Karl U. Smith, W. H. Whyte, and Martin Gross, and answering them. He is not afraid to state his own views forthrightly, but he is judicious, for example, in recognizing the possible dangers involved in "invasion of privacy" and in the accumulation of dossiers of computerized data based on psychological tests of thousands of American citizens.

THE AUTHOR's orientation is clearly quantitative, and it is not surprising that he draws heavily upon the work of Cronbach, Cattell, Eysenck, Guilford, Meehl, and Hathaway. But he also makes frequent reference to Allport, Murray, Bellak, Sundberg and Tyler—and to Rogers and Maslow. His considered treatment of observation, interviewing and projective techniques, though often highly critical, must mark him a liberal, if not an eclectic, among the measurement-oriented students of personality. In his two chapters on observational methods he includes expressive behavior and situational tests, and under interviewing (which he calls "the personality assessment interview") he describes stress, troubleshooting, and poll interviews as well as the more usual personnel and clinical types. He also has a brief but sophisticated discussion of

sources of error—those emanating from the interviewer, from the interviewee, and from the interview process itself. His section on personality testing *per se* is divided into the “self-report inventory” (Strong, MMPI, Cattell, EPPS, Q-sort, semantic differential, etc.) and projective techniques.

Now how does our obviously fair-minded author propose to integrate these many disparate bits and pieces into a meaningful personality picture? Let us turn to Chapter 11, “The Processing of Personality Measurement Data by Man and Machine.”

First of all, Kleinmuntz seems rather glib in stating, anent data collection, “Fortunately, all assessment data are quantifiable.” This may be theoretically possible, but it has hardly been demonstrated for several of the observational methods and projective techniques he has already described. (Has he been, perhaps, *too* inclusive or *too* tolerant for a specialist in personality measurement?)

Far more important, however, is the author's comprehension of the major issues involved in the clinical vs. statistical relationship. He discusses Meehl at some length, and follows Sundberg and Tyler with their three levels of personality assessment. With thanks to Goldman, he offers a brief section on “the proper use of clinical and statistical methods.” In essence, he suggests reliance on tables, formulas and prediction equations when they are available. When they are not, we need to use our heads or intuition, especially when special cases or unusual instances are involved. His conclusion is worth quoting: (p. 353).

“Finally, the use of clinical judgment is necessary when personality descriptions are required rather than straightforward predictions of probable behaviors. Although in principle it is possible to devise a computer program that would process a large array of diverse data—interview impressions, attitudes toward tests and the interview, the effect of a particular set of circumstances on the respondent, and so forth—and organize this information into a meaningful description of the person, currently no such computer program is in existence.”

To a clinically and humanistically-oriented reviewer, this seems an honest and commendable viewpoint, coming as it does from a man who is currently involved with computer approaches to personality data processing (some of which he describes in a final section.) Whether or not it is sufficiently idiographic to satisfy a strict Allportian, it provides flexibility and does not close the door to those using new and what the author calls “unconventional methods,” such as biographical data, computer simulation, or physical and performance tests. Nor does it rule out the contributions, frequently qualitative, of those exploring the normal personality and the creative, self-actualizing individual.

In a word Kleinmuntz, although he has chosen to use the narrower and more precise term *measurement*, has produced a very good volume on the *assessment* or *evaluation* of personality.

Double Talk for Twins' Mothers

Amram Scheinfeld

Twins and Supertwins. Philadelphia: Lippincott, 1967. Pp. 292. \$6.95.

Reviewed by I. I. GOTTESMAN

The author, Amram Scheinfeld, is a free lance writer, reporter, feature writer, and cartoonist and at one time was columnist for Cosmopolitan. He is also Vice-President of the board of directors of the Community Guidance Service of New York. He is author of You and Heredity, Your Heredity and Environment, and The Basic Facts of Human Heredity. He is a member of APA and of the American Society for Human Genetics.

The reviewer, I. I. Gottesman, received his PhD from the University of Minnesota, has taught in the Department of Social Relations at Harvard and at the University of North Carolina Medical School. He is now back at Minnesota as Professor of Psychology in the Departments of Psychology, Psychiatry, and Genetics Center and Coordinator of Research and Training in Behavioral Genetics. His research is with the genetic aspects of schizophrenia for which he, with James Shields, received the 1965 R. Thornton Wilson Award in Genetic and Preventive Psychiatry from the Eastern Psychiatric Research Association. He has his ABEPP diploma in clinical psychology and a book in the works on the genetic aspects of schizophrenia.

SCIENCE writers can perform a valuable service when they try to make our jargon-laden, pregnant-with-data reports of research intelligible to the layman. Some translators are scientists turned popularizers like Asimov and Spilhaus. Others are journalists fascinated by and cathected to science like Scheinfeld; his 1939 book *You and Heredity* was a best seller that has undergone two revisions. His current effort is about twins and supertwins—triplets, quadruplets and quintuplets—as people and is directed primarily to the parents of twins, secondarily “for everyone with a direct personal or professional interest in twins and their welfare.” The focus is on twins, in and of themselves—how to rear them and the kinds of problems they uniquely encounter. This focus contrasts with the usual one in the behavioral genetics sector of psychology that concerns itself with twins as means to an end—exploring the relative roles of hereditary and environmental factors in the determination of trait variability.

No doubt most mothers giving birth to two babies (or more) at one time are distraught and in need of reassurance and concrete guidance, not to mention a Nanny. Except for a couple of books by prolific mothers and nine pages in Doctor Spock, a vacuum existed with respect to a source of sound, practical, comprehensive advice to twins' mothers; the vacuum still exists, but it is now



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1969 *In press*

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Edited by **ROBERT ZAJONC**, *The University of Michigan.*

1968 *In press*

JOHN WILEY & SONS, Inc., 605 Third Avenue, New York, N.Y. 10016

much less intense. In his desire to fill the void, the author engaged in original research by surveying with his own questionnaires 500 mothers of twins belonging to 14 clubs in 9 states. We are not told what proportion of returns this represents, but at the time there were 200 clubs in 36 states with over 7,000 members; about 1% of all births are twins. The journalistic practice of using abundant verbatim quotes is followed. A scientist might say this was tantamount to the blind leading the blind; a mother might say she was thankful for any port in a storm. Scheinfeld relates his story in a light gossip fashion for the most part, but he also oversimplifies and talks down to the mothers. On other occasions he appears enamored of that which he proposes to dilute and leaves tedious scientific digressions intact. Too many of the 27 line drawings (by the author) and charts are redundant to what has been adequately explained in the text. While some chapters such as those on conception, delivery, and the types of twins are excellent examples of scientific reporting, others dwell on entertainment *per se*, such as the extracts from case histories of psychoanalyzed twins and the patter about famous twins in show business and sports. In an appendix labeled "Trailblazers in Twin Study" we learn that in 1931 Edward Clink and his twin sister arranged the first twin reunion in Warsaw, Indiana.

—"heredity may create the susceptibility; environment . . . may provide the extra push over the brink of insanity." Parents of a schizophrenic identical twin are left waiting for the other shoe to drop though; concordance is far from inevitable and rates for mildly affected cases are like those for samples of fraternal twins. Undoing some of the sound advice, Scheinfeld, without cause, recommends that parents of identicals, "as a preventive measure," make every effort to see that their achievements average out fairly closely to each other—plain double talk.

If ideas could be eugenically bred like plants and farm animals, *Twins and Supertwins* would be a good provider of 'genes' at the grandparental level for the all-purpose book envisaged by the author, i.e., a contributor of 25% of the genes. Nominees for the other grandparents would be among the writings of Dr. Spock, Helen Koch, Vandenberg, Shields and Gordon Allen.

Action Research for Trainers

P. Hesseling

Strategy of Evaluation Research in the Field of Supervisory and Management Training. Assen, Netherlands: Vangorcum, 1966. Pp. 359. Holland florin 35.—. (\$10.00).

Reviewed by E. B. KNAUFT

The author, P. Hesseling, is in charge of organization research groups at the Philips Company, Netherlands. He has worked with the Organization of Economic Cooperation and Development in Paris and has been a visiting professor at International Christian University, Tokyo.

The reviewer, E. B. Knaft, is Assistant Vice President, Personnel De-

partment, Aetna Life Insurance Company, Hartford. His PhD is from the University of Iowa and he used to do research in personnel but is now devoting full time to personnel administration. His particular interests are in the field of organization planning, management development, and compensation and in trying to apply some of the principles of behavioral science in day-to-day personnel administration.

It is quite likely that only a small fraction of the time and money spent on supervisory and management training throughout the world is devoted to evaluating the effectiveness of that training. Those who are concerned with this state of affairs will find both comfort and stimulating research suggestions in Dr. Hesseling's book. He has used a wide variety of techniques to evaluate the effectiveness of supervisory training courses conducted in a large manufacturing organization in the Netherlands.

Many trainers content themselves with self-report forms completed by trainees at the end of a supervisory development program. Unless the program is an outright dud, the self-reports tend to run from "good" to "excellent" and another "successful" training program has been launched. Not so for Hesseling. He devotes only a few pages to this overdone approach and concludes that at best it serves as a starter for serious evaluation of training efforts. The evaluation techniques that he employs range all the way from an Osgood semantic differential scale for ranking relative importance of various line and staff departments before and after training to measuring the amount of change in trainer control and trainee involvement throughout a series of training sessions.

WHILE the heavy empirical emphasis is refreshing and most chapters are individually well organized, the book lacks over-all unity and a smooth progression from one chapter to the next. An attractive and logical "grand plan" is revealed by the table of contents, but this is not translated into the words, sentences, and paragraphs that comprise the book. Part of the problem stems from a lack of specific training objec-

tives or hypotheses to be tested. Thus the reader may find himself in the middle of the application of an intriguing technique for measuring behavioral changes in a training program without knowing how these changes are related to the objectives (if any) of the training. It is unnecessarily hard work to read this book, but it is worth the effort to uncover the many ingenious bits of action research. Hesselings is not only an experienced trainer, but is equally at home with the time-sampling methods of the industrial engineer, the concern for quality of group interaction of the sensitivity trainer, and the precise measurement of the elegance of a group's problem-solving behavior à la Maier.

In many instances the author gives specific suggestions for sharpening the particular evaluation technique in the future or for better controlling the variables the next time around. These specifics are a refreshing change from the generalizations we usually see to the effect that "further research is required before definite conclusions can be reached." In this sense Hesselings' book is truly a report of action research—work that is in progress and is being shared with us in mid-stream.

This book is not for the self-satisfied trainer, the speed reader, nor the undergraduate, but it contains many provocative ideas for the serious training researcher and the student of organizational change.

a checklist of values and behavior-setting beliefs and (4) a family data form, containing demographic questions.

The description of the reliability of the interviewing coding is limited to two paragraphs and a table of per cent agreement for four levels of coding. The author does not define these four levels, stating only that the reliability decreases as the levels become more specific, and that the fourth and most specific level is not used for statistical analysis. The mean per cent reliabilities for the three broadest categories are around 90%. The reliability, therefore, seems to be acceptable, but the description of how it was obtained is wholly inadequate.

The main methodological problem of this book is the size of the sample, relative to its diversity. Families were selected for a wide range of diversity in various demographic traits.

The attempt to assess the effects of diversity in so many dimensions on a sample of only 39 families seems ill advised. The age and number of children and the education and social position of parents are the only demographic variables consistently influencing the interview responses. Since it is impossible to say whether this lack of demographic variation is due to genuine homogeneity of responses or to the inadequate sample size, only the most significant and meaningful demographic effects will be discussed in this review.

The text is largely devoted to a detailed description of the interview coding categories, their distribution for the sample as a whole and differences in their relative emphasis as a function of the sex and social background of the parents. Since it is impossible to outline all of the data in the text within the space of this review, the reviewer will define the main categories of analysis, illustrate the coding levels by listing some subcategories for some of these main categories, and describe some of the major findings and conclusions within each area of investigation.

THE AUTHOR begins her description of the data with an analysis of parental values. These are divided into values for parenthood and values for child rearing.

Influences on Parent Behavior: Psychologists not Included

Lois Meek Stolz

Influences on Parent Behavior. Stanford, Calif.: Stanford University Press. 1967. Pp. viii + 355. \$8.95.

Reviewed by LEIGH MINTURN

The author, Lois Meek Stolz, received her PhD from Columbia University. She was Director of the Child Development Institute of Columbia's Teachers College from 1929-1939. From 1941 to 1945 she worked with the Institute of Child Welfare at the University of California, Berkeley. In 1945 she became Professor of Psychology at Stanford, where she remained until her retirement.

The reviewer, Leigh Minturn, received her PhD from the Social Relations Department, Radcliffe College. She was a Research Associate at Cornell University from 1953-58, and a mem-

ber of the Psychology Faculty at the University of Illinois from 1958-1967. She is now a Professor of Psychology at the University of Colorado.

THIS STUDY is an investigation of the beliefs and values that influence parental child-rearing practices, as revealed in interviews with 78 parents—39 mothers and 39 fathers living in the Stanford area.

The interview schedule consisted of four parts: (1) a general exploratory interview, (2) specific areas of obedience and behavior and the family meal were selected for intense investigation, (3)



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CHILDHOOD AND ADOLESCENCE

A Psychology of the Growing Person

Second Edition

L. JOSEPH STONE, *Vassar College* *and* JOSEPH CHURCH, *Brooklyn College*

Random House, 1968; 640 pages; \$7.50

Professors Stone and Church trace human development from birth to adulthood giving primary emphasis to depicting the child, while also applying their knowledge to the practical problems of childbearing, education, and social action.

In this edition they have revised the discussions of language learning and cognitive development and have

introduced a theory of intellectual development and intellectual differences. More specific studies and discussion of research techniques including much on the newborn baby and infant have been added, in addition to a new chapter which coordinates previously scattered sections on developmental principles.

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Parenthood values comprise 28% of the values discussed and describe goals of the parental role. Child-rearing values comprise 72% of the values cited and refer directly to the way parents behave with their children.

The author divides parenthood values into eight categories: education, emotional security, control, nurturance, use of outside resources, (i.e., baby sitters, private lessons) economic support, good child rearing, and learning about child rearing. Education, emotional security, and control are stressed far more than other values and account for 79% of all the parenthood value responses. The types of parental values stressed by mothers vary by the age, socioeconomic status, and the education of the mothers and the size of their families. For fathers these responses are influenced only by age.

Child rearing values are divided into ten categories: i.e., moral, interpersonal, emotional security, educational, biological, and economic. Each of these ten categories is further divided into subcategories, for a total of 55 subcategories for all values.

Following their description of parental values, the author describes two types of parental beliefs: instrumental and descriptive. Instrumental beliefs concern relationships between values and acts that are believed to inculcate these values in children. Descriptive beliefs are not related to values, but to facts, and their interpretation. They are more common than instrumental beliefs, comprising 66% of all beliefs coded.

THE AUTHOR categorizes instrumental beliefs in terms of the values and sub-values to which they relate. Their major finding, in this area, is that the only important value that is supported by an organized complex of supporting beliefs is morality. Two-thirds of the most important values, i.e., family unity, manners, religion do not have many instrumental beliefs to support them. On the other hand, relatively unimportant values, e.g., biology and emotional security have a sizable complex of instrumental beliefs. Evidently parents are not sure about how to augment some of their important goals. The au-

thors state that parents seem generally unaware of the subtle effects of modeling behavior on children and usually do not emphasize the importance of demonstrating interest and affection for the child.

Parental concern for morality training focuses on obedience. Parents stress obedience in children as their most important instrumental act, thus mirroring their stress on control as an important parental action. It seems impossible to assess the extent to which this emphasis is caused by the selection of obedience as a special topic. Examples of common instrumental beliefs related to morality are the beliefs that children obey fathers better than mothers because they see their fathers less often, because fathers spank harder or because fathers are more strict. Some parents emphasize the influence of religion and emotional security in the development of morality, while others emphasize the influence of the peer group.

Descriptive beliefs are divided according to their topical references: characteristics of children, heredity and environment, learning, reward, punishment, control.

ALL categories of descriptive beliefs are important for most parents. Fathers, however, tend to emphasize the importance of environmental control while mothers are more likely to emphasize the importance of heredity. The author speculates that mothers may be more reluctant than fathers to admit to the importance of their influence upon their children, because of their greater involvement with the children.

Learning through practice, experience and imitation is most strongly stressed, and little emphasis is given to reasoning or explanation. Reward and punishment are usually viewed as methods for insuring continued performance of activities that are already learned, rather than as techniques for producing learning. Punishment is discussed considerably more than reward in the interview responses, with physical punishment receiving the most attention. The determinants of acceptance of punishment are apparently different for men and women. Mothers tend to favor punish-

ment, particularly physical punishment, if they are uneducated and have large families, whereas uneducated fathers and fathers with large families are strongly against physical punishment.

Following the discussion of values and beliefs the authors analyze four types of influence on parent-child interaction: (1) characteristics of family members, (2) behavior settings, (3) previous experiences of parents and (4) communication sources.

THE results of the analysis of family influences show that parents are much more conscious of behavior in their children that they would prefer to change than they are of other behaviors. Mothers of higher socioeconomic status are more likely to stress their own characteristics while those of lower status stress the influence of their children's characteristics.

Behavior settings are divided into those inside and outside of the home. The behavior setting of the evening meal is chosen for particular emphasis in the interview. Parents are not highly conscious of the influence of settings upon their socialization behavior but all parents discuss settings to some extent.

Parents emphasize home settings more than twice as much as settings outside the home. Many are particularly concerned with controlling children's behavior when company is present. Many of the extra-home settings described by Barker and Wright as being important for children are not mentioned by parents in these interviews.

The previous experiences of parents are broadly classified into those occurring in childhood and those occurring as adults. The most crucial influence upon parental behavior comes from parental experiences with their own parents. In general parents stress positive, rather than negative, influences from their own parents but the difference does not reach significance. Socially mobile parents remember more negative experience in their childhood more than do parents who are not mobile. Parents are usually more influenced by the same sex parent, with the exception of some lower class fathers, who may have been raised in father-absent homes and are,

therefore, more influenced by their mothers.

Parents who rely strongly upon communication sources for guidance are those with younger firstborn children and smaller families, who stress beliefs rather than values. Mothers are, in general, more influenced by these sources than are fathers. The author concludes that general feelings of inadequacy, rather than a specific problem, lead parents to rely upon communication sources for guidance.

THE AUTHOR concludes that basing their interview on the practical concerns of parents, rather than the theoretical concerns of child psychologists, has resulted in the definition of new problems. The values that appear as most important to these parents are not those that appear in previous, theoretically oriented studies. Further, the methods used by parents to achieve common goals vary widely for all the goals. Parents rely on reward and punishment in controlling children, and report four to five times more beliefs about punishment than about reward. Parents also show little understanding of individual differences among children. They evidence fairly rigid beliefs in sex stereotyping and stages of development. They do, however, recognize the influence of their children and spouses on their own reactions, a factor in child rearing neglected by most psychologists. Parents and psychologists share a lack of concern for the influence of behavior settings on children's behavior.

This illumination of the contrast between the problems of child rearing as perceived by parents and by psychologists is probably the most important contribution of this book. Despite the shortcomings of sampling and methodology it does provide a sobering contrast to the treatises on child development that sometimes sound as if all mothers are psychology majors who raise their children without ever consulting their husbands.



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1968 LC:68-21892 254 pages, \$5.95

Hospitalization and Discharge of the Mentally III

Ronald S. Rock

This comprehensive report explores the correlation between statutory law and the reality of commitment procedures. The purpose of the study was to identify critical stages in the hospitalization system where a decision had to be made that had direct bearing on the disposition of a case. These are initiation, formal decision-making, and discharge. Rock analyzes each of the stages and sets forth a series of specific proposals designed to strike a balance between the legal, medical, and social considerations involved.

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The Central Nervous System and Fish Behavior

Edited by David Ingle

Of great importance today is our understanding of the central nervous system and its relation to behavior. This book deals with the teleost fish, an experimental animal of renewed interest to zoologists, psychologists, neurophysiologists, and anatomists. The authors, who presented these papers at the recent symposium on "The Central Nervous System and Behavior of Fishes," discuss visual mechanisms and behavior, functions of the forebrain, conceptual problems in behavior analysis, and biological approaches to memory.

1968 LC:68-24558 272 pages, illus., \$15.00

The Battered Child

Edited by Ray E. Helfer, M.D., and C. Henry Kempe, M.D. Foreword by Katherine B. Oettinger

This vitally important book touches on all aspects of the grave problem of child abuse; its history and incidence; the responsibility of physicians to report cases; the role of radiologists and pathologists in diagnosis; types of parents who abuse children; help for both parents and children from psychiatric and social workers; the role of the law and law-enforcement agencies. Outstanding professionals in all areas have contributed their experience to this volume.

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Psychoanalytic Diversity

Benjamin B. Wolman (Ed.)

Psychoanalytic Techniques: A Handbook for the Practicing Psychoanalyst. New York: Basic Books, 1967. Pp. x + 596. \$15.00.

Benjamin Wolstein

Theory of Psychoanalytic Therapy. New York/London: Grune & Stratton, 1967. Pp. ix + 210. \$8.00.

Reviewed by STEPHEN A. APPELBAUM

The editor of the first book, Benjamin B. Wolman, is Professor of Psychology, Graduate Division of Long Island University, and Dean of the Faculty of the Institute of Applied Psychoanalysis. He is author of *Contemporary Theories and Systems in Psychology* and editor of *Handbook of Clinical Psychology*. The author of the second book, Benjamin Wolstein, is on the faculty of the W. A. White Institute of Psychiatry, Psychoanalysis and Psychology and Clinical Professor of Psychology at Adelphi University. He is author of *Freedom to Experience, Irrational Despair, Countertransference, Transference, and Experience and Evaluation*.

The reviewer, Stephen A. Appelbaum, is Senior Psychologist, Menninger Foundation, Topeka. He received his PhD from Boston University in 1957. He is also a research fellow at the Topeka Institute of Psychoanalysis, and member of the Psychotherapy Research Project of the Menninger Foundation. He is particularly interested in the nature of change before, during, and after psychotherapy, and the evocation of experience and its influence on therapeutic change and learning.

THE Wolman book consists of 20 original articles covering a spectrum of psychotherapeutic approaches that,

loosely speaking, can be labeled "psychoanalytic." Freud is, of course, prominently represented, by Joseph T. Coltrera and Nathaniel Ross, Samuel D. Lipton, Mark Kanzer and Harold P. Blum, as are Ferenczi (Michael Balint), Klein (Hanna Segal), Alexander and French (Sheldon T. Selesnick), John Rosen (David Rubinstein), Adler (Kurt A. Adler), Jung (Gerhard Adler), Sullivan (Earl G. Wittenberg and Leopold Caligor), Horney (Harold Kelman and Joseph W. Vollmerhausen) and the existential position (Medard Boss and Gion Condrau). Several contributions of new ideas are made (Benjamin B. Wolman, Martin Grotjahn, Hyman Spotnitz) and also included are articles on psychoanalytic psychotherapy (Sidney Tarachow and Aaron Stein), group psychotherapy (Max Day and Elvin B. Semrad), hypnoanalysis (Lewis R. Wolberg) and research in technique (John E. Gedo and George H. Pollock). The diversity in point of view to be expected from this collection of names is found in the book, ranging from differences in emphasis to outright contradictions. Thus, the latter part of the book's title—*A Handbook for the Practicing Psychoanalyst*—is misleading. A practitioner who would use this diversity as a guide in matters of technique would

be so eclectic as to be unable to decide what to do.

Rather than a closely-reasoned analysis of issues in technique, the book is a text, and a fine one. The writing is generally good. The organization makes for clarity and ease of reading. The authors were evidently asked to address themselves to similar topics so that comparisons between the approaches could be made easily (concepts of cure, transference, counter-transference, resistance, interpretation, working through). Even the printer has contributed to readability through the use of white space and choice of type.

The chapters tend to be discursive expositions of theory with sometimes lesser integration of theory with technique. Often the theory is presented as the backdrop for the empirical development of technique, as in the three excellent chapters on the history of Freudian psychoanalysis, that is delineated through tracing Freud's statements on technique. These developments in technique are shown to promote and to be promoted by changes in his theory.

Books on psychoanalytic techniques, for each of the varieties of practicing psychoanalysts, should search those issues that practitioners discuss among themselves. Such books would attempt to come to grips microscopically with the elements—emotional experience, cognitive understanding, and technical operations—that are usually alluded to in this book macroscopically by such shorthand terms as the transference neurosis, idealized images, attitude of the therapist, etc.

A list of references is missing from the article on existential psychoanalysis. This is especially unfortunate since much is made in that chapter of a quote from Freud, who, like the Bible, has the continued misfortune of supplying everyone with something with which to justify his previously-reached conclusions. In this instance Freud is alleged to have meant that the "principal means" in therapy is the development of a "more free openness." The reader should be helped, with a reference, to see the original quote in context.

One cannot cavil with Wolman, who has supplied us with an excellent text, for not supplying us with a handbook

for the practicing psychoanalyst, only for titling his text that way.

THAT the term "psychoanalytic" beckons a diversity of readers creates a considerable problem for Wolstein's book as well. Many psychoanalysts, for example, no longer take seriously, as Wolstein does, such questions as whether the psychoanalyst should have sexual intercourse with his patients, or whether the analyst should pay the patient for any therapeutic benefit the analyst derives. But Wolstein's theory of psychoanalytic therapy does, in fact, require him to address such issues. He is stirred, as can be seen in his initial pages, by important issues—the uniqueness of each psychoanalytic encounter, the borderland in psychotherapy between science and art, the need to separate experience from theory, the nature of the participation and the values of the psychoanalyst. But rather than work at such issues in the vineyards to which Freud led us, Wolstein seems to feel that more complete answers require his own conceptual scheme. Thus the book is for the most part a highly individualized conception of psychotherapy, with its own notations, diagrams, and symbols. As with most new ways of thinking, and especially with new language, the book is hard going (and the repetitious, thick prose does not help).

Who will do the hard work required of such new theorizing in order to recast his thinking in these new forms? Presumably it will be those who feel frustrated by the inadequacy of existing approaches. Wolstein makes no bones about feeling that psychotherapy, as he evidently believes it is generally practiced, requires considerable improvement. In particular he seems to feel keenly that pre-existing approaches fail to recognize that psychotherapeutic phenomena take place in the context of shared experience (so why not sexual intercourse with patients?), fail to allow for therapeutic exploitation by both patient and analyst of the patient's recognition of "counter-anxiety, counter-resistance, counter-transference" in the analyst (and so why shouldn't the analyst pay the patient?), and he seems to believe that many psychoanalysts de-

prive patients of "freedom" and "democracy" by behaving in an authoritarian manner. Many of us would deal with these problems by dropping from technical discussions such surplus-meaning words as "freedom" and "democracy" while others would think about, and possibly experiment with, techniques still within our conceptual mainstreams. But Wolstein, instead, goes for novelty and reconceptualization, which is, of course, his privilege. But, while trailblazing, Wolstein sets straw men to fire, and here his laborious schematization teeters on the central question, "Is this trip really necessary?" The problems noted by Wolstein in his criticism of existing approaches might be dealt with more parsimoniously and effectively as casualties of small talent, or misunderstood theory.

The Ghetto Gap: Educating the Educator

Joan I. Roberts (Ed.)

*School Children in the Urban
Slum: Readings in Social Science
Research.* New York: Free Press,
1967. Pp. xiii + 626.

Reviewed by EDWARD T. PRYOR

The editor, Joan I. Roberts, a social psychologist whose graduate training in psychology at Teachers College, Columbia, is combined with previous preparation in high school teaching and education. She has conducted a two-year research study of the cross-cultural adaptation of American teachers in East Africa. She is currently Research Associate for Project TRUE at Hunter College.

Edward T. Pryor, the reviewer, received his PhD in sociology from Brown

University and has taught at the University of Colorado, University of Hawaii, and is now Assistant Professor of Sociology, University of Western Ontario. His research interests include urban sociology and family organization and he is finishing a book concerned with the history of family structure in New England.

THE EDITOR of this reader does not purport that it is intended for a range of courses from astrology to zoology, but stresses that this volume is designed for a specific audience, "the teacher or teachers-in-training in our urban centers. . . ." The general introduction is a readable, succinct justification for an inter-disciplinary (anthropological, sociological, and psychological) approach to understanding the problems of urban education. To the editor's credit, the readings themselves are not simply categorized in terms of the above disciplines, but are divided into four parts dealing with "cognitive," "affective," "familial," and "educational" perspectives on the American urban environment. Each of these parts is introduced with a brief summary of the readings presented and the rationale for their inclusion.

Obviously, in terms of the research available, the selection of readings must be arbitrary in an integrated collection of this sort. Fortunately, the editor has resisted the temptation to focus only on topical or controversial aspects of urban educational problems. Contributions such as those by Torrance ("Cultural Discontinuities and the Development of Originality"), Bernstein ("Social Structure, Language, and Learning"), Langner ("Socioeconomic Status and Personality Characteristics"), and Bossard and Boll ("Rituals in Family Living") are 'middle range' readings describing the cultural and sociological antecedents of social class, racial and ethnic differences in values, aspirations, and school behavior. At the same time, the inclusion of other articles dealing with Negroes, Japanese, Puerto Ricans, Chinese, suburbia, and Italians as subcultures enhances the possibility that the teacher-reader will comprehend the commonalities and differences in background of the urban child, while unifying readings



Three books of great current interest from

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FANTASY AND FEELING IN EDUCATION

(An Answer to Bruner)

By Richard M. Jones

University of California at Santa Cruz

Here is a call for a wedding of psychotherapy and pedagogy. In this new book Richard M. Jones elaborates his own theory of instruction, considering the works of Bruner, Erikson, and Piaget, but emphasizing the need for coordination of the cognitive approach with emotional and imaginal ones. He is concerned with how to involve the child emotionally — how to arouse his rich imaginal responses — and thus motivate him to learn. Intended both as a practical guide and as a theoretical stimulant, the book arises from Dr. Jones's background as clinician and as educator and from his experiences testing the experimental social science curriculum "Man — a course of study." It is a major statement from a distinguished young scholar, and an important contribution to the field.

1968

240 pages

\$6.95

TESTING AND FAIR EMPLOYMENT

Fairness and Validity of Personnel Tests for Different Ethnic Groups

**James J. Kirkpatrick, Robert B. Ewen, Richard S. Barrett,
Raymond A. Katzell**

New York University Department of Psychology

Are current evaluation tools — primarily psychological tests — appropriate for use in selection of minority group employees? This book reports the research findings from five studies using large numbers of white, Negro, and Spanish-speaking subjects in several different occupations. It finds that tests which are useful for one ethnic group are not always useful for others, and suggests how accuracy of prediction can be improved.

1968

145 pages tables charts

\$5.00

TEMPERAMENT AND BEHAVIOR DISORDERS IN CHILDREN

Alexander Thomas, Stella Chess, Herbert G. Birch

New York University School of Medicine and Albert Einstein College of Medicine

This new volume is concerned with factors that contribute to behavior disorders in young children and with the new, shortened treatment method emphasizing parent guidance. It focuses on the role the child's temperament plays in the emergence and elaboration of behavior problems. Case studies are given, including diagnoses and recommendations made, and methods of data collection and analyses are described fully. This is the second volume to result from the celebrated New York Longitudinal Study from birth of 136 children. The earlier volume, dealing with the theoretical framework was published in 1963. (*Behavioral Individuality in Early Childhood*, \$1.75).

1968

309 pages tables charts

\$8.50

NEW YORK UNIVERSITY PRESS

WASHINGTON SQUARE, NEW YORK 10003



such as that by Rosen ("Race, Ethnicity, and the Achievement Syndrome") should further assist the reader in seeing the relationship between culture, socialization, and educational goals.

As a logical outcome of the purpose of this reader, the teacher is not neglected; he is also seen as a product of a culture and possessing career ambitions and biases toward desirable classrooms and clients. The article by Charters ("Consequences of Educators' Social Positions on the Teaching-Learning Process") should, at least, make the teacher cognizant that his or her "definition" of the situation may be as important as that of the student in determining classroom attitude and educational performance. The most discouraging implication is that, still, in the late 1960's it is necessary to remind the teacher (or convert to the position?) that differential acculturation and socialization are realities of the educational process. Indeed, recent portrayals of the urban ghetto, such as that by Jonathan Kozol (*Death at an Early Age*, Houghton Mifflin), would indicate that we have a long way to go in re-educating the urban teacher. Leaving aside the polemics of such descriptions as that of Kozol, it would be hard to come away from such a book without thinking that teacher biases and, at times, downright antagonism toward ghetto students, are not pervasive features of contemporary urban education. A reader in urban education really needs no further justification than this.

THE FAILURE of social science and especially sociology (despite its long tradition in the United States of concern for urban problems) to contend with education in the urban slum is never more obvious than when a reviewer scours around for articles that "should have been included." As apt testimony of this neglect, for example, the special issue (Fall, 1959) of the *Harvard Educational Review* devoted to the topic of "Sociology and Education" hardly alludes, except by negation, to the issue which Roberts defines as crucial. In this regard, an example of what I mean by "negation" might be useful: "Probably the most fundamental

condition underlying this process [elementary school class socialization] is the sharing of common values by the two adult agencies involved—the family and the school. In this case the core is the shared valuation of achievement." (Talcott Parsons, *The School Class as a Social System: Some of its Functions in American Society*, p. 309.) Left unsaid is that this systemic linkage is exactly what is often *not* true in the urban, slum school where family and school do *not* share the common interpretation of what the school should be about. The current neighborhood and community political action in American cities to increase local school autonomy and parent participation in policy-making manifests the lack of shared, and even the presence of contradictory, goals of urban social and political institutions involved in education.

My major criticism of Roberts's cross-disciplinary approach to urban school problems is that it is truncated. Absent is a treatment of political power and organization as it may impinge, if not dictate, the future direction of slum education. The urban teacher may be in for a rude awakening if he or she is not prepared, academically and otherwise, to comprehend the increasing militancy of ghetto parents and power groups as they align and consolidate their attempts to determine educational policy and teachers' roles in the slum school. Admittedly, the urban child may become the pawn in this process but this is exactly why the urban teacher must be primed to confront such a possibility.

Even bad writing is likely to be powered by intense emotion. Feeling himself so moved, the bad writer is easily self-persuaded to take the power of his starting emotion as the measure of his writing. Consequently he sees only what he intended to write, what he was moved to write. He never sees what he has actually written.

—JOHN CIARDI

Teacher Grist

R. Murray Thomas

Aiding the Maladjusted Pupil: A Guide for Teachers. New York: David McKay, 1967. Pp. ix + 182. \$2.25.

Reviewed by NORMAN M. CHANSKY

The author, R. Murray Thomas, is Dean, School of Education, University of California, Santa Barbara. He has taught at Brockport College of the State University of New York and for two years was on the Indian Team of the State University. He is author of several other books in the area including *Individual Differences in the Classroom*, and *Social Differences in the Classroom*.

Norman M. Chansky, the reviewer, is Professor of Educational Psychology, Temple University. His PhD is from Columbia and he has taught at Adelphi, Oswego State College, and the University of North Carolina at Raleigh. He is author of *Untapped Potential: Rehabilitation of School Dropouts*. His research is in the areas of anxiety training, and achievement.

PSYCHOLOGISTS have frequently glossed over the palpable, trenchant realities occurring in the classroom that create problems demanding the teacher's understanding, prevention, and solution. One teacher is face to face with a perverse bully; another with a non-reader; a third, with an overdependent child. How might a teacher recognize as indicative of maladjustment such symptoms as tantrums, stuttering, non-participation in a group, and frequent bodily complaints? What kind of program is it possible for school personnel to institute to instruct a maladjusted youth who is not benefitting from ordinary classroom procedures? Thomas, in a thoughtfully conceived text, offers much grist to a teacher's mill.

His is not a cook book, nor is it a theoretical treatise on the psychopathology of classroom living. Rather it is a translation of depth psychology into an idiom readily comprehended by edu-

tators. To be adjusted, Thomas suggests, a child must fulfill his needs within a reasonable time limit, and not interfere with the need fulfillment of others. Kinds of needs and patterns of adjustment are then explicated. The author clearly distinguishes between the training, the role expectations, and the services of a teacher and a clinician in a rehabilitation program for the maladjusted child. In her role, the teacher is expected to make a maladjusted student dissatisfied with himself only when there is a "reasonable chance of accomplishing the necessary change." The change, moreover, must hold promise from the student's point of view. In addition, the teacher is expected to introduce alternative if not competing mechanisms, and to structure classroom activities so that enactment of the salutary behavior will be successful. A built-in safeguard of when in doubt, leave it out, may not, however, be a sufficient deterrent to the teacher from continuing a non-functional approach.

This book is well balanced between questions and caveats. The enumeration of success and failures in the various case studies presented emphasizes that those concerned with education of the maladjusted are still groping in trying to find solutions. The lucid presentation of cases, moreover, allows ready identification with the teachers.

One intent of the author, however, was not fully realized. He wished to free teachers of guilt concerning problems of classroom management, often inspired by psychologists. Instead he gives them a different set of moral imperatives. Many a section begins, "The teacher should. . ." Although he avoids the opaque, he nevertheless offers advice that owes its heritage to the adumbrative clinical observations that pervade our thinking. He makes comments, moreover, that will not be acceptable to all psychologists. Teachers do make children dissatisfied with themselves by giving them grades. Such dissatisfaction, however, may motivate change in the mildly maladjusted but may more deeply entrench the defenses of severely maladjusted. Also, the evidence in favor of track assignment is too scant to merit approval.

In general, Thomas, has not only provided teachers with a review of their educational psychology and mental hygiene courses, but a new set of tools and a hope that may be translated into action the next time they meet their pupils.

Of Flies and Genes

P. A. Parsons

The Genetic Analysis of Behaviour.

London: Methuen, 1967. (Distributed in the U. S. by Barnes & Noble) Pp. viii + 174. \$4.50.

Reviewed by MARTIN MANOSEVITZ

The author, P. A. Parsons, received his PhD from Cambridge University, has taught or researched at the University of California, Davis, St. John's College, Cambridge, and the University of Melbourne. He is now Professor of Biology in the School of Biological Sciences, LaTrobe University, Victoria, Australia. He has lectured on genetics in Australia, Italy, Chile, Brazil, and Mexico, and has contributed widely to the literature of the field of genetics.

The reviewer, Martin Manosevitz, received his PhD from the University of Minnesota and has taught at Rutgers. He is now Assistant Professor of Psychology in the Department of Psychology at the University of Texas, Austin. His research is in behavior genetics and animal temperament with emphasis on hoarding in mice. He also has strong interests in personality.

IN the last two decades we have witnessed an enormous growth of interest and research in behavior genetics. Hall's 1951 summary of the literature was accomplished in less than 25 pages while in 1960 Fuller and Thompson's book contained more than 346 pages. At present it is doubtful whether the heterogeneous behavior genetics literature could be adequately summarized in

a single volume. Perhaps a better approach is to write books with more limited aims. *The Genetic Analysis of Behaviour* is one example of such an approach.

Parsons's goal is to discuss methods used in behavior genetics and to illustrate how hereditary and environmental factors influence behavior. Given these broad goals he imposes the following limits: no effort will be made to review the literature exhaustively, and the book will reflect the author's interest in mating behavior of *Drosophila*.

This monograph does not serve as an introduction to behavior genetics. It will probably be most useful as supplemental reading and should be of interest to students and investigators in behavior genetics and comparative psychology. The author expects his readers to have a limited background in genetics and statistics. However, I feel that something more than a limited knowledge of these fields is needed to follow his discussion of biometrical methods.

The book attempts to demonstrate ". . . how behavioural traits can be analyzed from the genetic point of view, with some emphasis on the evolutionary implications of variations in behaviour" (p. vii). The discussion starts with single gene and simple chromosomal inversions. The data presented demonstrate how very small changes or rearrangements in the total genetic endowment may affect complex behaviors. These demonstrations were chosen mostly from laboratory experiments using different species of *Drosophila*.

A description of selected quantitative methods used in behavior genetics is found in the next section of the monograph. The presentation quickly covers the elementary concepts in quantitative genetics and moves on to examples that demonstrate the application of these methods. Many behavioral characters are determined by polygenic factors and therefore the psychologist will find quantitative methods useful in the analysis of gene and behavior relationships.

COUPLED with the above emphases the writer stresses the evolutionary significance of the response systems which

have been analyzed by these two general approaches, i.e., single gene and polygene. This is one of the highlights of the monograph—the demonstration that behavior is related to fitness and selection and therefore plays an important role in evolution.

A variety of behaviors and organisms respond to selection pressure under laboratory conditions. However, laboratory studies of selection have been most successful when *Drosophila* is the organism of interest. Parsons briefly summarizes mammalian selection experiments and then devotes the remaining portion of the chapter to selection experiments that have used the fruit fly.

Approximately two-thirds of the volume is devoted to research on *Drosophila*. The author provides an excellent summary of this research with a special emphasis on mating behavior that is Parsons' area of expertise. I know of no other source in which this literature is so well summarized.

When the author turns to rodents and humans his coverage is very uneven. Understandably he could not provide exhaustive coverage of the entire field of behavior genetics. However, it is possible to be selective and at the same time maintain some degree of representativeness and it is here that the attempt falls short. Perhaps this monograph could have been most successful if the author focused only on *Drosophila* research.



The kind [of democracy] that will prove most helpful to the development of humanity is that which will not assume all men to be equal or strive to educate them equally, but will give to each the opportunity to discover and develop whatever is superior within him, and encourage him to give creative direction to those whose talents are less or different.

—EARLE BIRNEY



BRFLY NTD

B. B. CHATTERJEE, P. N. SINGH, and G. R. S. RAO. *Riots in Rourkela: a Psychological Study*. New Delhi: Popular Book Services, 1967. Pp. 144.

In the Spring of 1964, hundreds of Muslims were burned out and butchered in Rourkela, a newly developed steel town born out of 30 tribal villages in India. The massacre was carried out by Hindus, aroused by the passage of trains bearing Hindu refugees driven from East Pakistan, and finally committed to action by the circulation of rumors forecasting Muslim attacks. Three members of the Ghandian Institute of Studies conducted a study into the complex cultural, political, and psychological roots of this tragedy. Moving into the area within six weeks after the riots, the investigators interviewed 200 Muslim, Adivasi, and Hindu respondents and talked at greater length with 16 strategically placed informants. It is not surprising that the rather simple frequency breakdowns emerging from the interview results fail to penetrate the complex etiology of the bloody riots; it is impossible to assign appropriate weights to tribalism, anomie, international politics, administrative ineptitude, and sheer accident. Nevertheless, the authors make a conscientious effort to understand a tragic social explosion that could have been prevented, and in the process they shed light on some of the problems of our own time and place.

EDWARD JONES

WAINWRIGHT CHURCHILL, MD. *Homosexual Behavior Among Males: A Cross-Cultural and Cross-Species Investigation*. New York: Hawthorn, 1967. Pp. 349. \$7.95.

This is a wide-ranging discussion of homosexual behavior among males. It

examines such behavior from a cross-cultural and cross-species perspective. The orientation of the author is clearly against considering homosexual behavior *per se* as a symptom of psychopathology and his basic plea is for the end of social discrimination against those who practice homosexuality. However, he goes considerably beyond this noble position to assert that, in effect, the strength of the tendency to homosexual behavior is innately determined. This leads him to minimize and neglect the social determinants of this form of "deviant" behavior.

MORTON DEUTSCH

LLOYD A. FREE and HAROLD CANTRIL. *The Political Beliefs of Americans: A Study of Public Opinion*. New Brunswick, N. J.: Rutgers Univ. Press, 1968. Pp. xiv + 239. \$10.00.

This book, unfortunately, does not live up to its title. It reports the results of a couple of Gallup surveys conducted before the election in the fall of 1964. The surveys employed a superficial questionnaire and, as a consequence, the results and interpretations are somewhat shallow. For example, it is asserted that liberal sentiment is much more prevalent than average among those with only a grade school education and people with incomes of less than \$5,000 per year. This statement overlooks the high F-scores generally found in such groups and basically ignores the patterning and function of political beliefs.

MORTON DEUTSCH



The Biochemistry of Memory: WITH AN INQUIRY INTO THE FUNCTION OF THE BRAIN MUCOIDS

By SAMUEL BOGOCH, M.D., Ph.D., *Foundation for Research on the Nervous System, and Boston University School of Medicine*. Based on the author's extensive research in the field, and on a review of current work on the molecular basis of memory, the book describes studies dealing with the mucoids of the brain, their structure, metabolism, pharmacology, immunology, development, and state in learning situations. The work is interdisciplinary, covering material of interest to those in the neurological sciences, psychiatry, and biochemistry, as well as to students of medicine and biology.

1968 280 pp. 44 illus. 21 tables \$7.50

Disordered Behavior: BASIC CONCEPTS IN CLINICAL PSYCHIATRY

By ERIC PFEIFFER, M.D., *Duke University Medical Center*. This text presents major themes and clinical syndromes in a balanced coverage of topics including: affective disorders; schizophrenia; organic brain disease; neurotic behavior; suicide; alcoholism and the addictions; psychiatric problems associated with old age; psychological reactions to illness and dying; psychotherapy; the healthy personality; and the psychiatric interview. "Concise, well-written. Deals clearly with some usually hazy areas for students—for example the nomenclature of depression."—Robert L. Leon, M.D., University of Texas Medical School at San Antonio.

1968 224 pp. cloth \$5.75 paper \$4.00

Psychological Diagnosis in Clinical Practice: WITH APPLICATIONS IN MEDICINE, LAW, EDUCATION, NURSING, AND SOCIAL WORK

By BENJAMIN POPE, Ph.D., *The Sheppard and Enoch Pratt Hospital*, and WINFIELD H. SCOTT, Ph.D., *National Institute of Mental Health*. "The authors have approached their task carefully and have not allowed their enthusiasm for testing to interfere with a critical evaluation of the tests they discuss. They make clear, with liberal references to the research literature, the values and limitations of these tools. . . . This book can be enthusiastically recommended to all those who are interested in the state of the art and science of psychodiagnostic testing, circa 1967,"—Murray Wexler, in *JAMA*.

1967 360 pp. 18 illus. \$8.00

Meaning and Mind: A STUDY IN THE PSYCHOLOGY OF LANGUAGE

By ROBERT F. TERWILLIGER, *New School for Social Research*. A survey and critique of psychological and psychologically oriented theories of language and meaning, this work introduces Professor Terwilliger's own attempt to formulate a theory of language. The study takes into account existing contributions to theory, including the work of Maier, Piaget, Skinner, Chomsky, Osgood, Wittgenstein, McBride, Jakobsen, and Fishman. Following an outline of the nature, structure, and development of language in the early chapters, discussions turn to psychological theories of meaning and the author's critique and alternative theory; grammar; language disturbances; the effects of language on other mental processes; and the social-manipulative uses of language.

1968 368 pp. 10 illus. paper \$3.00

Principles and Methods of Social Psychology

By EDWIN P. HOLLANDER, *State University of New York at Buffalo*. Designed for the undergraduate course, this important text introduces the historical background of social psychology as well as theory and method. Included are such topics as the contemporary field of social psychology; attitudes; social interaction; and leadership and supervision. References; name and subject indexes. "A solid, up-to-date, broad-gauged and well-written book which fills a vacuum in the current books available."—Hadley Cantril, Institute for International Social Research

1967 550 pp. 77 figs. 10 tables \$8.00

Current Perspectives in Social Psychology: READINGS WITH COMMENTARY. Second Edition

Edited by EDWIN P. HOLLANDER and RAYMOND G. HUNT, *State University of New York at Buffalo*. The enlarged Second Edition of this work provides the student with an awareness of the scope of social psychology in terms of its prominent concepts and related research. Thirty-three of sixty-five selections are new to this edition. Extensive bibliography; name and subject indexes. "A very impressive library of papers which makes the student acquainted at relatively low cost with the best current thinking in all the recognized areas of social psychology."—H. L. Ansbacher, University of Vermont.

1967 700 pp. illus. paper \$5.00

OXFORD UNIVERSITY PRESS

200 Madison Avenue, New York, N.Y. 10016

JOHN HINTON. *Dying*. Baltimore: Penguin, 1967. Pp. 208. 95¢.

Considering that death and taxes are presumed the only certainties of human existence, it is interesting that so much academic effort is expended upon taxes and so little upon death. A decade ago, Herman Feifel (*The Meaning of Death*. New York: McGraw-Hill, 1959) broke the calm, and the subsequent trickle of books has become . . . well . . . at least a rivulet.

Of all such books known to this reviewer, Hinton's book is foremost in its ability to communicate the major issues of terminal illness to both the health professional and the interested layman. Paying close attention to the professional literature, Hinton discusses such topics as physical and emotional distress in the terminally ill, attitudes and reactions to dying, and treatment of the dying. The book would make an excellent supplementary text for advanced courses in nursing, social welfare, and medicine, but its most important audience consists of anyone whose work involves contact with the dying and the bereaved, most certainly including any who perform psychotherapy.

Hinton's only sin is that of omission: not developing sufficiently the psychosocial and sociological aspects. But he has accomplished, in admirable fashion, his mission to discuss "... the available knowledge and ideas on death . . . aspects relevant to dying—to the one who is dying, to those about him and to those who will mourn his death."

RICHARD KALISH

BIRGITTA LINNÉR. In Collaboration with RICHARD J. LITTELL. Preface by LESTER A. KIRKENDALL. Photographs by Lennart Nilsson. *Sex and Society in Sweden*. New York: Pantheon Books, 1967. Pp. xvii + 204. \$5.95.

This is a book written for the general public, rather than the professional, that gives a description of sexual mores in Sweden. It also discusses sex education and provides illustrations of the material used with different age groups. The book is neither as titillating nor as informative as one might expect.

MORTON DEUTSCH

SEYMOUR M. LIPSET and STEIN ROKKAN (Eds.) *Party Systems and Voter Alignments: Cross-National Perspectives*. New York: Free Press; London: Collier-Macmillan, 1967. Pp. 570. \$9.95.

This book contains a wealth of information about how voters have aligned themselves with different parties as a function of their social background, class allegiance, and religious affiliation. Although the studies reported in the various nations (and these cover such locales as the United States, France, Japan, Brazil, Finland, Spain, West Africa) are not cross-national replications of one another, they have common themes. They give insight into the question of how political structures and voter alignments have reflected differences in the timing and character of two major revolutions of our time: the Industrial and the Nationalistic. Lipset and Rokkan have written an introductory theoretical chapter which, unfortunately, borrows from Talcott Parsons in style as well as in theoretical content.

MORTON DEUTSCH

PHILIPPE MALRIEU. *La Construction de l'Imaginaire*. Bruxelles: Dessart, 1967. Pp. 246.

Although some mention of research is made in this book on the nature and function of imagery, the approach is predominantly literary and philosophical rather than research-theoretical. For those who appreciate this sort of fare, there are suggestive discussions on mythic imagery, intentional imagery, and the dream. A section on the genesis of imagery leans heavily upon the works of Piaget and Wallon. While not particularly original, the book does present approaches to, and perspectives on, the problem of imagery other than those traditionally offered by psychology.

DAVID ELKIND

HORST MARIENFELD. *Simulationstechnik: Allgemeine Grundlagen und Anwendung in der Starrfluglertechnik*. (Verein Deutscher Ingenieure. VDI-Dokumentation Fachbibliographie Nr. 6.) Düsseldorf: VDI-Verlag, 1964. Pp. viii + 388.

A collection of approximately 3,000 references covering all areas of the design and flight of aviation and spacecraft that involve human factors. About 80% of the entries are from English literature, but only 50% of them seem to be from periodicals covered by the *Psychological Abstracts*. The author prefaces this reference work by presenting a detailed classification system and his rationale.

LEONARD WESLEY

PAUL R. MILLER. *Sense and Symbol: A Textbook of Human Behavioral Science*. New York: Hoeber Medical Division, Harper & Row, 1967. Pp. xviii + 398. \$9.75.

The author, an assistant professor of psychiatry at Northwestern University, has attempted to integrate into one unified whole a number of ideas and concepts collated from the writings of Freud, Piaget, Hebb, Cattell, Franz Alexander, Gellhorn, Gerard, the neopsychanalysts, and other writers. As so often happens with ambitious undertakings in social science, the basic building material used in constructing the edifice appears to have been too weak and the talent of the author-architect limited.

JOSEPH D. MATARAZZO

WILLIAM A. SCOTT. With the collaboration of RUTH SCOTT. *Values and Organizations: a Study of Fraternities and Sororities*. Chicago: Rand McNally, 1965. Pp. 290.

Some seventeen propositions about the relationship between personal values and characteristics of membership in social fraternities and sororities were examined within a large university setting. The study was carefully executed, clearly described, and conservatively interpreted. While many of the hypotheses stemming from the literature on interpersonal attraction were supported, the best suggestions for future research are forthcoming from those that were not supported. The contemporary college scene offers many opportunities for the replication and expansion of the present study. The findings should contribute to the making of more psychological sense

Principles of GENERAL PSYCHOLOGY

Third Edition

GREGORY A. KIMBLE

University of Colorado

The Third Edition of this distinguished and widely used textbook continues to offer a scientifically accurate account of contemporary psychology for the beginning student. It also retains the sound scholarship, clarity of style, and detailed treatment of important topics that characterized previous editions. Full of absorbing experimental detail, it views the subject as an objective, observational science. Dealing with basic methodological matters first, the book builds on this foundation, then presents the more complicated aspects of psychology in terms which refer back to earlier discussions. Each chapter begins with an orienting overview, contains extensive summaries at the end of every major section, and concludes with a list of impor-

NORMAN GARMEZY

University of Minnesota

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ROBERT FOX, Vanderbilt University

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Provides convenient access to original source material to supplement any basic text. Its organization and contents, however, closely parallel that of *PRINCIPLES OF GENERAL PSYCHOLOGY*, Third Edition. Focusing upon contemporary issues in psychology, it contains a number of classic pieces plus several which show the application of modern psychological method and theory to current social problems. The forty-eight readings are divided into parts according to their topic area and there are comprehensive editorial introductions for each part and brief introductory discussions for each reading. 1968. 375 pp. 7X10. Paper-bound. Illus. \$4.75

PSYCHOLOGICAL DEVELOPMENT OF THE CHILD

LANGDON E. LONGSTRETH

University of Southern California

Firmly based on current research in child development, this textbook presents the basic factors of heredity, learning, motivation, and intelligence, and then examines the progression from infancy to adulthood with frequent references to the research data. Throughout, the author employs an empirically based, systematic learning-theory frame of reference. The three methods of psychological study are carefully distinguished. Correlational studies are used to describe the course of psychological development; experimental investigations test the explanations of developmental facts; and, finally, clinical case histories are offered as illustrations of scientifically derived findings. Recent trends are fully covered: cognitive development, as treated by Piaget and others; environmental effects on intelligence, including results from recent physiological experiments; theories of intelligence; heredity and the increasingly significant findings of the role of genes. Instructor's Supplement available. 1968. 571 pages. Illus. \$8.00

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of the rapidly changing, and somewhat turbulent university campus of today.

IRA ISCOE

BERNARD H. SHULMAN. *Essays in Schizophrenia*. Baltimore: Williams & Wilkins, 1968. Pp. xv + 206. \$8.75.

The author is a long-time member of the psychiatric community in Chicago with teaching appointments at both Northwestern University Medical School and the Alfred Adler Institute. In describing his point-of-view as holistic, teleological, phenomenological, field theoretical, and indeterministic, and in asserting that schizophrenia is not only a reaction but also an "action, a decision and a choice," Dr. Shulman suggests that his intellectual and theoretical position is closer to that prevailing at the latter institution than at the former.

Five essays express his position on the ontology of schizophrenia, the meaning of the symptom, and on the theory, the procedures, and the special tactics of psychotherapy with schizophrenics. A sixth chapter touches on hostility, dependency, regression, and other miscellaneous issues in the treatment of schizophrenics on which the author had some notes but not enough material for a separate treatment of each topic.

Considering the asking price for this slim volume of *penseés*, prospective readers may wish to sample the contents in a library or bookstall before committing themselves to ownership.

RALPH HEINE

PAUL ROBERT SKAWRAN. *Seelische Kräfte und ihre Rhythmik*. Freiburg im Breisgau, Germany: Verlag Karl Alber, 1965. Pp. 260.

"Between living and thinking, there is the soul. It erupts like a plant out of a seed from the earth—and material connected into something living." This first sentence of the book communicates something about the author's sweeping coverage of all the basic problems and events in psychology. The first chapter covers the psychic concept of energy, which the author embraces. The second chapter deals with psychological typology, beginning with Heraclitus. Plato, Aristotle, Galen are all extensively cov-

ered, while Kretschmer is extolled. The third chapter deals with racial, sex, age, and environmental typologies. From the third chapter on, the reading becomes more difficult and less conceptualizable. The main concept of the author is "tension" and its twin "de-tension," which he sees central to all aspects of human living and, therefore, to all psychological functioning. If parochialism is a virtue, this book, with its primary reliance on German philosophers, literary figures, and social scientists, deserves merit. American sources are nearly never, French sources even less, mentioned. About 57% of all sources quoted were published prior to 1940, 71% prior to 1950. This volume would have made a greater contribution to psychology had it been published in the early 1930's.

IJA N. KORNER

PAUL ROBERT SKAWRAN. *Psychologie der Anpassungsprozesse*. Freiburg im Breisgau: Verlag Karl Alber, 1965. Pp. 211.

The companion volume to the author's *Seelische Kräfte und ihre Rhythmik* permits the viewing of a psychology of adjustment, written in disregard of the psychology of learning, positivism and neo-positivism, and American psychology in general, in short, the major movements in contemporary psychology as familiar to readers of *Contemporary Psychology*.

The topic areas are the usual ones (the nature of the contacts of the infant with his environment, the nature of affects, the relationship between affects and reactions, drives, instincts, impulses and inclinations, and others) and, occasionally, topics less often dealt with (fury and the lust to attack, curiosity as an affect, the joy of play and joy and boredom, the impulsive act of will and the wish, and others). There is no reference to contemporary, and little to experimental, research in general. The explanations for human behavior are dated, as well as somewhat arbitrary.

IJA N. KORNER



JOSEPH C. STEVENS, RICHARD J. HERRNSTEIN, and GEORGE S. HEYNOLDS. *Laboratory Experiments in Psychology*. New York: Holt, Rinehart & Winston, 1965. Pp. vii + 115. \$4.00.

This book, intended for use in a laboratory course taken concurrently with introductory psychology, outlines a series of experiments designed to demonstrate a number of phenomena and principles in the areas of sensation, perception, and human and animal learning. My reservations about it are based primarily on pragmatic considerations. The variety of equipment and subjects called for are not available in most introductory laboratories. Also some of the experiments involve quite subtle concepts. Given the level of material, the manual is suitable for an honors section of an introductory course, or if it were supplemented with material on experimental design and inferential statistics, it could be used in a junior-senior level course in experimental psychology.

FRANK L. POLSON

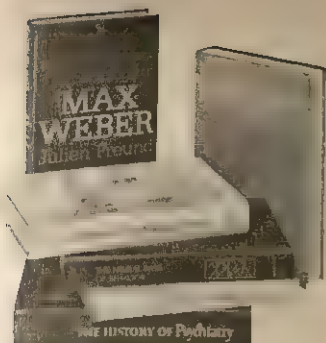
SEYMOUR SUDMAN. *Reducing the Cost of Surveys*. Chicago: Aldine, 1967. Pp. xv + 246. \$7.95.

This is a very useful monograph that would be a valuable supplemental reading in any social research course. It contains a wealth of practical, detailed information about factors affecting the cost and quality of the various phases of an interview survey. One fascinating tidbit: interviewers who are less enthusiastic about interviewing tend to be higher in quality and lower in cost than those who are more enthusiastic.

MORTON DEUTSCH

RONALD TAFT. *From Stranger to Citizen*. New York: Humanities Press, 1966. Pp. xiv + 108. \$6.50.

This monograph summarizes a series of studies of immigrant assimilation in Western Australia. Its most general finding seems broadly applicable to intra-national as well as international migrants. Namely, social acceptance and respect for the vocational and cultural aspirations of immigrants are the keys to assimilation. On the other hand, formal instruction in the language and



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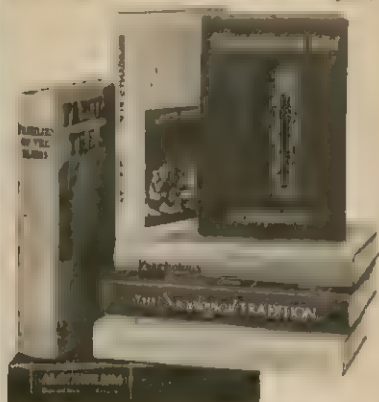
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mores of the host society have only a limited effect on other aspects of assimilation.

MORTON DEUTSCH

RAYMOND VAN OVER and LAURA OTERI (Eds.) In collaboration with ANGUS McDUGALL. *Biographical Introduction* by J. WAINWRIGHT EVANS. Foreword by EILEEN J. GARRETT. *William McDougall: Explorer of the Mind: Studies in Psychical Research*. New York: Garrett Publications, 1968. Pp. 319. \$8.50.

This book is interesting, but contains little that is not better discussed at a later stage in the history of parapsychology. It does, however, concern McDougall, one of the main figures in the history of psychology. Although the selection of the writings is entirely parapsychological, it is a very substantial body of writing and of considerable intrinsic merit.

MICHAEL SCRIVEN

On Pills and Patients

J. R. Wittenborn

The Clinical Psychopharmacology of Anxiety. Springfield, Ill.: Thomas, 1966. Pp. x + 228. \$6.75.

Reviewed by LLOYD K. SINES

The author, J. R. Wittenborn, received his PhD from the University of Illinois, taught at Yale, and is now Professor of Psychology and Education, Rutgers University. He is the developer of the Wittenborn Psychiatric Rating Scales and his research and writings concern such diverse topics as psychopharmacology, personality appraisal, and psychodiagnosis.

The reviewer, Lloyd K. Sines, received his PhD under William Schofield at the University of Minnesota and has remained at Minnesota as Associate

Professor of Clinical Psychology, University of Minnesota Medical School. He has also held the position of Director of Research at the Fergus Falls Minnesota State Hospital.

THIS short volume is aimed at clinician-investigators (presumably physicians) concerned with treatment, via pharmacological means, of anxiety and related symptoms (phobia, tension, irritability) in nonschizophrenic patients. Most of the first half of the book consists of a review of controlled studies reported during the period 1960-64 bearing upon the evaluation of several main classes of drugs (barbituates, phenothiazines, minor tranquilizers, anti-depressants) among four major diagnostic groups of patients (anxiety states, depressive, alcoholic, and geriatric).

That part of the book is rather tedious reading (somewhat over 100 studies are referred to or summarized in the text) and the reader is left wishing the author had found a more efficient method of distilling the essence of that body of research—perhaps by presenting the data in tabular or 'box-score' form. The chapter summaries, however, provide succinct statements of the major conclusions derived from the literature review. For example, it is concluded that: 1. in the treatment of anxiety states a) tranquilizers are superior to barbituates, b) there is no clear-cut hierarchy among the tranquilizers in effectiveness, and c) selection of a specific drug for a specific patient must take into account the side effects likely to occur; 2. among depressives a) both major and minor tranquilizers, as well as certain anti-depressants, are efficacious in the control of anxiety, and b) patient variables such as age and specific symptom constellation are related to drug of choice; 3. with alcoholics, the control of anxiety-related symptoms in the acute phase of withdrawal may be effected by a number of the major and minor tranquilizers, but the efficacy of one drug, chlorthalidoxepoxide, is especially indicated both during and following the acute phase of alcohol withdrawal, and, 4. among geriatric patients a) specific drugs from the major and minor tranquilizer as well as anti-depressant groups have been established

as effective in the control of anxiety-related symptoms, but b) the problem of side effects is especially acute with such patients, since several of the compounds studied have been shown to exacerbate miscellaneous illnesses peculiar to that age group.

THE REMAINDER of the book deals more with methodological considerations in psychopharmacological research, and it is here that Wittenborn is at his best. It is shown how the vagaries of anxiety ("an episodic, self limiting disorder," "—a syndrome comprising various discernibly different manifestations") poses particular difficulties for the investigator intent upon evaluating its management or amelioration. The consequent necessity for meaningful control groups in pharmacological studies is reiterated, though the pertinence of uncontrolled clinical drug trials in the early study of new chemical agents is conceded.

Sections of the book devoted to discussions of basic psychometric principles and psychopharmacologic research strategy reflect the author's sophistication concerning the assessment of the behavioral phenomenology of emotional and mental disorders, an discussion of optimum assessment strategy and statistical design of efficient studies will spare drug investigators much unprofitable effort. For example, he points out that the use of psychological tests that are designed to measure and describe the more enduring (characterological) aspects of personality may be too insensitive to fluctuations in more transient psychological phenomena (such as anxiety) to be of use in studies evaluating the effectiveness of therapies directed toward the control or amelioration of such patient variables.

The book will be of greater value to investigators than to clinicians, since its most cogent conclusions relate to research strategy and methodology, rather than to therapy. This, in part, is because of rapid advances in the area of psychopharmacology itself—advances that practically insure the obsolescence of any specific pharmacotherapy by the time it is thoroughly researched and promulgated.

FOUNDATIONS OF ABNORMAL PSYCHOLOGY

Edited by Perry London, University of Southern California, and David Rosenhan, Swarthmore College

This multi-authored text, edited and integrated by Professors London and Rosenhan, deals with positive abnormality as well as traditional psychopathology. The authors examine abnormality from the vantage point of what is known in general psychology of personality, human development, neurophysiology, and genetics. Authors include Hirsch of Illinois, Maher of Brandeis, Kagan of Harvard, Zigler of Yale, Treisman of the University of Reading, Bandura of Stanford, and Ashby of Illinois.

1968

656 pp.

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THEORY AND RESEARCH IN ABNORMAL PSYCHOLOGY

Edited by David Rosenhan and Perry London

The editors bring together those basic theoretical views and empirical findings necessary to a full comprehension of abnormal phenomena. The volume includes papers on learning, reinforcement, emotion, anxiety, and punishment, as well as on specific abnormal processes and their amelioration. Emphasis is not only on empirical papers, but also on theoretical works.

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Edited by J. W. Kling and Lorin A. Riggs, both of Brown University

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By Peter M. Milner, McGill University

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Alternate Language Systems

Georgia Babladelis and Suzanne
Adams

*The Shaping of Personality: Text
and Readings for a Social-Learn-
ing View.* Englewood-Cliffs, N. J.:
Prentice-Hall, 1967. Pp. ix + 522.
\$5.95.

Reviewed by RAY MULRY

The first author-editor, Georgia Babladelis, received her PhD from the University of Colorado and has taught at Oakland City College and at California State College. She is now teaching at the College of San Mateo. The second author-editor, Suzanne Adams, received her PhD from the University of California at Berkeley and teaches at Merritt College, Oakland.

The reviewer, Ray Mulry, received his PhD under Rotter in social learning

theory from the University of Connecticut. He spent a postdoctoral year at the Center for Psychological Studies, Educational Testing Service, and is now Assistant Professor at the University of Texas in Austin, where he is affiliated with both the clinical and personality programs. He does research in social learning and personality.

AN evaluation of this text of collected readings should take into consideration that it was intended for use on the undergraduate level for students who have had some preparation in the areas of learning, perception, and motivation. The aims of the authors were: (1) to present a systematic account of personality development; (2) to state a social learning position clearly enough to permit an instructor to use the book as a basic or as a supplementary text; (3) to provide an account of the kind of data, theoretical discussions, and case descriptions that lead to the formulation of theories; (4) to stimulate questions and to involve the student in a developing area of study.

To broaden the implications and rele-

vance of the articles to their point of view, the editors have introduced and commented on each chapter. Through their presentation of theoretical issues and their discussions of the included articles they have come close to achieving their original aims. Despite their efforts, however, there are times when one may question the relevance of a particular article to the theme being developed.

Although the editors lean heavily on the language of learning theory and are primarily interested in the social learning process, they do discuss genetic and maturational contributions to personality development. Generally their discussions of the interaction of organismic and environmental variables are instructive and relevant to their preeminent concern with a changing organism constantly acquiring definition in a complex social environment.

Their commitment to the language of learning theory is not consistent from chapter to chapter. As they attempt to relate man's motives and actions to more intuitive explanatory constructs, their reliance on learning terms wanes and concepts identified with other frames

of reference appear with greater frequency.

THEIR joining of ordinary language with the constructs of learning theory has both advantages and disadvantages. By extending the laws and concepts of learning theory to conceptualizations of events commonly interpreted in ordinary language terms, the student may perceive more readily a relationship between learning theory and everyday experience. The major disadvantage of this approach is that it tends to obscure relationships between theory and the formulation of concepts defined in terms consistent with the theory. The editors' definition of self as both a "point of sentiment" and "the accumulated or stored expectations of how one will behave under a variety of situations" bears no direct or systematic relationship to learning theory and reflects their tendency to alternate between language systems. It is questionable whether this is an efficient approach to teaching students how to form useful psychological concepts and how to ask meaningful scientific questions. Hopefully, this text will contribute to the eventual resolution of this issue.

In addition to the aforementioned considerations, the text does deal with many of the important issues in the area of personality development. Moreover, the extensive coverage of current research along with the editor's attempts to inspire questions and thoughtful considerations of issues should lead the interested student to a meaningful examination of the process of personality development.

Before God I do not know how the thing arises in me, without the participation of my will. I do not know that which I must write.

—JAKOB BOEHME

Socratic Synopsis

Richard I. Evans

Dialogue with Erik Erikson. New York: Harper & Row, 1967. Pp. xvi + 142. \$4.95.

Dialogue with Erich Fromm. New York: Harper & Row, 1966. Pp. xix + 136. \$4.95.

Reviewed by KAY TOOLEY

Richard I. Evans, the author, is Professor of Psychology at the University of Houston. He has reviewed recently for CP and more about him can be found on page 356, CP, 1968, 13.

Kay Tooley, the reviewer, is Instructor in the Department of Psychiatry, and Lecturer in Psychology at the University of Michigan. She works in psychotherapy with children and late adolescents at the Children's Psychiatric Hospital at the University, and she has also done research in the area of ego adaptation in late adolescence.

THESE BOOKS are the edited final product of taped conversations with Fromm and with Erikson; the tapes were intended by Dr. Evans to serve as an adjunct to classroom lectures that would add depth and immediacy to historical review and critical comment on the thought of major contributors to personality theory. The books are highly readable and pleasantly discursive without being scattered. The author confines his interview questions to a few broad areas and controls the flow of subject matter to that which is relevant to that area. The question outline makes the dialogue method more manageable but it is often irritating to the reader who might be quite familiar, for example, with the eight stages of man, but would have liked to hear Erikson continue his speculations about the effect on the individual of the need for population control.

One mode of questioning utilized in the format of the dialogues deserves special mention: Evans gives Erikson and Fromm the opportunity to correct misinterpretations of their ideas. They

are surely entitled to this; it must be very frustrating to an author to have a reading public swoop down on his work and rush away to quote and apply in all directions, leaving him rather helplessly saying "But I never meant that"! Erikson makes rich use of the opportunity to object to the use of eight stages as an "Eriksonian achievement scale" with trust vs. mistrust, etc., being the pass-or-fail items. Development of mistrust is as important to reality testing as the development of trust is to emotional development, Erikson reminds his audience. What is hoped for is an optimal ratio, not an achieving of the one and an avoiding of the other—a correction of a misinterpretation that he extends to all of his developmental stages.

THE central problem in critical appraisal of these books is summarized in the problem of designating their potential audience. Paradoxically, as the conversations provide something of interest for everyone from advanced students in personality theory to interested non-professionals, the books are not really suited to the needs of any one group within this range. The quality of the dialogues assumes a detailed acquaintance with the thinking of Fromm and Erikson that the beginning student would not have. Evans foresees this problem but his method of footnote referral to other works doesn't answer it. The books demand too much of the unsophisticated and provide too little to the advanced students of personality theory. The latter group will wish that the review of past contributions had been emphasized less, and the interludes of spontaneous, stimulating elaboration of a striking thought had been permitted and encouraged to exist longer. For example, Fromm tells that he dislikes and is suspicious of group therapy as another instance of erosion of privacy—an attitude that will delight some and exasperate others. If further exploration of the question had been allowed, perhaps he could have formulated more fully the basis for his attitude—a formulation that would have been as interesting and useful as his observations about the relationship between private man and man-in-a-group have always

been. The subject was rather hastily closed, or so it seemed to this reader, and the discussion redirected. It was particularly at such times that it would have seemed more profitable to waive the requirements of a disciplined format in favor of discursive exploration. If Evans had compelled himself to decide upon the intended audience beforehand, he might well have avoided this disturbing and distracting split in focus—a wavering between didactic review and stimulating conversation.

The dialogue method really promises to be something quite special. It is superior for many purposes to biography with its tendency to over-report of life detail. ('In '43, he broke his knee on a walking trip through Bavaria.') Its greatest value lies in its ability to convey qualities of personality and thinking in the writers interviewed, Fromm and Erikson in this case, qualities which are obscured and even obliterated in their own more formal, academically disciplined writings. In the interviews, these men seem often to be 'thinking out loud' and it is valuable and informative to be there when they do it, before they have an opportunity to decide what in such thinking should be kept and refined and what should be thrown away. Too often those committed to psychological research and theory emphasize scientific method and objectivity, forgetting by the time the study is completed or the paper written the sources of their hypotheses; these sources are thoughtful internal essay (in the old sense—"trying the nature of") and consequent personal opinion. The reporting of these processes is what gives Freud's writing much of its vividness and compelling power. Eager to move away from introspection as a method for validating hypotheses, psychologists have underplayed its role in generating hypotheses. The dialogue approach has the potential of helping to restore internal essay and opinion to their place of rightful dignity and importance, and at the same time to provide the reader with rich material for his own internal essays.

ON THE OTHER HAND



US PSYCHOLOGY
INTERNATIONAL

Internationally information seems to flow out of the USA. I have just examined all major French psychological journals and found an increasing dependence on the US literature. *L'Année Psychologie*, for instance, has 78% American citations, *Bulletin d'Etudes et Recherches Psychologiques* 79% during 1967. Of the 300 books reviewed by all French journals, about 150 were American ones, also in 1966-67. I am trying to say that much of the foreign work is based on what we find and write in the US.

FRANK WESLEY
University of Portland

IN FAVOR OF OUR OWN HOUSE

In his review of the Chicago conference on training in clinical psychology Shakow (CP, May, 1968, 13, 225-229) devotes considerable space to the concept of the psychological center, contrasting it with training in a medical setting. He argues persuasively for the latter while admitting to a strong distaste for the former. Although many of his observations are correct, I fundamentally disagree with his conclusions, notably his assertion that "where a person is competent, he is not troubled by autonomy problems" (p. 227).

Shakow's arguments, it seems to me, miss completely the basic reasons why psychologists have begun to search for alternatives to training in the medical setting. Undeniably, there is much to be learned in such places, and psychological centers may be unable to match these opportunities for a long time to come. Nor is anyone willing to trade "shoddy quality in return for independence." Rather, the issue is deeply embedded in the role and status of the clinical psychologist in the medical setting. The primary mission of medical schools is to train physicians, and the function of departments of psychiatry is to train psychiatrists. This is their right and their privilege, and they can choose to define the role of the psychologist in any way they

desire. It follows inexorably that, as long as psychologists work in this setting, they are and remain guests in the house of medicine. One may esteem guests and grant them privileges, but the host runs his house as he sees fit. To use another analogy, young adults leave the parental home even though its resources and facilities may be far more abundant than anything they can immediately call their own. They leave for the simple reason that they want to lead their own lives, make their own mistakes, and build their own future. Adolescent rebellion may be a part of this urge but it is not the principal reason.

Clinical psychology has come a long way in America since World War II and it has forged an image unequalled by anything colleagues have achieved elsewhere in the world. This progress, in which we can take justifiable pride, has occurred because psychologists have created a large number of new roles for themselves. They have won the respect of society, in comparison to which the antiquated role of the "ancillary" or "paramedical" test looks very pale indeed. A fair number even have turned to private practice, an activity which Shakow so deeply deplors. Is it unreasonable that psychologists wish to determine what shall be taught in our training programs, whose cooperation we wish to enlist for what purpose, and that we want to create our own image rather than one dictated to us by other professions?

The clock cannot be turned back, and clinical psychology is disinclined to do so. Admittedly, the psychological center as an institution deeply committed to service, thorough training in all phases of clinical psychology, and all-around excellence largely remains an ideal. Nor does independence imply the absence of meaningful collaboration, on an equal level, with neighboring professions. I, for one, am convinced that such centers will come into being, and hopefully they will meet the high standards, espoused by Shakow, with which I am in full agreement.

HANS H. STRUPP
Vanderbilt University

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The Analysis of Cognitive Abilities

J. P. Guilford

The Nature of Human Intelligence. New York: McGraw-Hill, 1967. Pp. 538. \$14.75.

Reviewed by SIR CYRIL BURT

Neither the author nor the reviewer need much introduction. J. P. Guilford, the author, has been for a good many years Professor of Psychology at the University of Southern California. He received his PhD in 1927 from Cornell University and has taught at the Universities of Illinois, Kansas, and Nebraska. He is a past-president of APA, a recipient of APA's Distinguished Scientist Award and the author of numerous articles and books.

The reviewer, Sir Cyril Burt, received his DSc from Oxford in 1923 and is Professor Emeritus in the University of London. He is a Fellow of the British Academy, Editor of the British Journal of Statistical Psychology and has contributed much to the fields of statistical analysis, mental differences between individuals, factor analysis, and mental inheritance.

detailed reviews of earlier and current researches, the whole volume forms one of the most valuable contributions to psychology that has appeared during recent years.

The book is divided into five parts. The opening chapter presents a succinct historical survey of mental testing and its development from Galton to the present day. This is followed by a discussion of the different modes of approaching the problem—experimental, genetic, and statistical, emphasizing the special value of factorial techniques. Part I then ends with a comparison of

the various theories of intelligence—Spearman's two-factor theory, the hierarchical model developed by Burt and Vernon, Bloom's taxonomic model, Guttman's facet model, and Guilford's own structure-of-intellect model.

Part II consists of a detailed exposition of what in his first paper on the subject Professor Guilford called "the three faces of intellect." In place of a "hierarchical" model he proposes to substitute a "morphological" model. This is the name suggested by the astronomer Zwicky for models in which the classification proceeds, not by successive subdivisions into genera, species, varieties, etc. (as in the biologist's classification of plants and animals), but by simultaneous cross-classifications (as in the logician's traditional classification of propositions and inferences and the modern classification of crystals). The more usual name is "combinatory classification"; Yule calls it "manifold clas-



J. P. GUILFORD

PROFESSOR GUILFORD's book, so he tells us, has a twofold aim: first, to provide a sound theoretical foundation for the concept of intelligence and for the practice of intelligence-testing; second, to plant the concept of intelligence within the main stream of psychological theory. What he has written should therefore appeal both to the general and to the practical psychologist whether working in the educational, the clinical, or the industrial field. In view of this multiple interest, and of the wide erudition displayed in his

sification." It is really a special case of the hierarchical classification, namely, one in which the subclasses of each class are the same, and similarly with the sub-subclasses, and so on. The scheme is thus a multidimensional generalization of the familiar two-dimensional matrix.

Guilford uses three 'determinables' (if I may borrow the terminology of the British logicians): (i) 'operations,' with 5 categories or 'determinates'; (ii) 'products,' with 6; and (iii) 'contents' with 4. Five chapters deal in turn with the five 'operations,' namely, cognition (which includes not only awareness, but also discovery or rediscovery of information, and comprehension or understanding), memory, divergent production, convergent production, and evaluation. Within each chapter a section is devoted to each 'product,' and within each section subsections then deal with the various 'contents.' The product categories are 'formal,' the content categories 'substantive'; i.e. contents classify information according to its matter, products according to its structure. Thus 'products' are divided, somewhat on the lines of symbolic logic, into 'units,' 'classes,' 'relations,' 'systems,' 'transformations,' and 'implications.' The categories for 'content' are termed 'figural' (concrete sensory information, either perceived or recalled as imagery), 'symbolic' (letters, numbers, musical notation, etc.)—both figural and symbolic categories being subdivided into visual and auditory, 'semantic' (meanings, commonly expressed by words), and 'behavioral' (i.e. 'information, essentially non-verbal, involved in human interactions', virtually what Thorndike called 'social intelligence'). The triple combination formed by a specific operation, a specific content, and a specific product specifies a 'factor,' so that, according to the familiar algebraic rule, there are $4 \times 5 \times 6 = 120$ factors in all.

EACH chapter starts with a rectangular matrix enumerating the 24 factors for the particular operation with which it deals, arranged in 6 rows (for products) and 4 columns (for contents). Besides the three-letter symbol which serves to label the factor, each cell also states the number of known fac-

torial studies in which it has occurred and the age levels at which it has been found, if it has occurred in studies of children. To indicate more precisely the nature of each factor typical tests are described, with illustrative examples.

British factorists will probably not be altogether convinced by the arguments for omitting a factor of general ability, and many critics will doubtless feel that the model proposed is more suited to provide an a priori logical scheme for classifying tests than an empirical synopsis of factors actually established. After all in every psychological test the problems must necessarily be presented in terms of some kind of material or content, and each must necessarily require some kind of process or operation. Moreover, in order to vary the difficulty and to cover the whole range of mental ability, the contents of the different tests, and consequently the operations involved, will need to differ in complexity.

Nevertheless, the 'determinates' under these three determinables—the subclasses or categories—seem to be confirmed, or at least strongly supported, by factorial studies. Only 81 factors have so far been clearly established, chiefly at the level of the senior high school or among adults. In the table for cognitive operations every one of the 24 cells is filled. For convergent production, however, more than half are empty. Rather surprisingly, more factors are established in the case of divergent production, owing doubtless to the special interest Guilford has taken in creativity. In the tables for divergent production and for memory only 8 cells are empty; in those for evaluation 11 are empty. The gaps in the tables appear chiefly in the columns for figural and behavioral contents. The possible factors represented by these empty cells, we are told, have not so far been investigated, presumably because no suitable tests have been devised. Since they would entail diagrams, drawings, and other concrete types of stimuli, they would be less easy to construct and to apply. Thus the model should be particularly useful in indicating the sort of tests that still need to be invented, and in suggesting new and interesting areas for research.

In Part III Dr. Guilford proceeds to

set forth the implications of his model, and of the factors he believes to have been established, for general psychological theory. During the twenty years or so there has been a trend away from stimulus-response psychology and towards selection of cognitive theory"; and the other trend, so he believes, his factor analysis tends strongly to support. In general point of view is an information processing psychology." Information processing is defined as "that which an organism does to 'determine' or 'communicate'"; and, whereas the traditional conception is concerned only with differences in the amount of information, Guilford's is concerned also with differences in kind. The engineer measures in terms of uncertainty, Guilford's in terms of certainty.

WHAT traditional psychology calls "perception" he redefines "that stage in cognition when 'mental units' (e.g., letters) are combined as such." This represents an initial stage in the 'input' of information, or rather "in the process whereby information is extracted from the input supplied by the sensory receptors." A characteristic of recent psychological work is the rediscovery of attention. This seems to have resulted partly from the interest in what Head long ago called 'intelligence' that now appears as one of the functions of the reticular formation, and partly from investigations into 'selective activity.' The 'channel capacity' of most human beings is exceedingly limited. Hence, in order to reduce incoming information to an amount that can be effectively handled, it would seem (as Broadbent has suggested in his paper on "A Mechanical Model for Human Attention") that something very like a 'filtering device' must be inserted in the sensory approaches to the brain. This reinterpretation of attention in operational terms helps us to devise more effective tests for studying the factors that affect attention, e.g., in Guilford's nomenclature, the cognition and the evaluation of figural units.

Similarly, it is argued, the factorial study of what is vaguely called learning

should help the theorist to attain a better understanding of the specific operations involved. After emphasizing the growing discontent with the inadequacies of the concept of association, Guilford points out that what is learned takes the form of new products of information. Classical studies of conditioning, and of other processes where the association principle has commonly been invoked, are to be reinterpreted as entailing the acquisition of 'implications.' Patterns of movement and other skilled activities are to be "cognized in the behavioral (self-information) category, but on the output side they are executive systems." Reinforcement should be regarded as an instance of the feedback of information. The processes of reorganization described by the Gestalt psychologists "are properly categorized as 'transformations'"; and, since they too are 'products,' these transformations, like relations and systems, are transposable, and may thus "mediate a transfer of training."

The last and longest chapter in this section deals with the most complex of all intellectual activities, namely, creative production and problem solving. The tests designed to deal with such processes have failed to reveal a unitary factor of their own, and prove to be 'factorially complex.' Most of the variances, we are told, are accounted for by such factors as "verbal comprehension, conceptual foresight, semantic elaboration, and divergent semantic transformations." An ingenious diagram presents an "operational model for problem solving in general, based on concepts furnished by the structure-of-intellect scheme." This is in some ways reminiscent of the TOTE model, that Miller, Galanter, and Pribram developed "to supersede the stimulus-and-response sequence." (TOTE stands for the sequence "test-operate-test-exit").

The importance of motivation is rightly emphasized. As Dr. Guilford observes, there is now an increasing recognition that the utilitarian drives of hunger, sex, pain, and the like, that figure so conspicuously in theories of the associationist and behaviorist schools, by no means suffice to account for the instigation of intellectual activity, even in its simplest manifesta-

tions. Thorndike has pointed out that even rats appear often to be impelled by sheer curiosity. When an organism is endowed with a certain equipment, it has a natural urge to exercise it. Thus with human beings "cognition has its own motivation, and the drive is increased by discrepancies between input and stored information." The current notion of "incubation, intuition, inspiration," as phases in creative thinking should, it is maintained, be "replaced with empirically founded conceptions," especially those of divergent production that involve transformations. Lord Brain once argued that the genius differs from the ordinary man by the exceptional wealth of 'schemata' (a term Head borrowed from Stout); and this, says Guilford, really means that the genius has a greater mass of "stored products of information." The actual arrangement often occurs during the so-called "period of incubation," very like (I venture to suggest) the "unconscious reconstructions" and "secondary elaborations" which Bartlett, Freud, and others observed in the case of memory and recall.

PART IV deals with "determiners of intelligence." It begins by reviewing the evidence for mental inheritance (mostly based on assessments for general ability rather than special ability), and notes several parallels between the modes of brain functioning and the various categories in the "structure of intellect." Studies of "environmental determiners," we are told, have been handicapped by the vagueness and complexity of the broad conditions commonly selected for investigation—e.g., social class, and those associated with sex and race. Two short chapters summarize the results of the research on intellectual development and intellectual decline; and the book ends with an epilogue (Part V) entitled "Retrospect and Prospect." Here Dr. Guilford briefly recapitulates the main theses he has advanced, and sets out the various corollaries, theoretical and practical, that may be drawn from the novel elements in his interpretation. On the theoretical side, he indicates numerous neglected problems still awaiting research. The chief practical suggestions

relate to the future development of education both in schools and in colleges. Hitherto curricula and teaching methods have been concerned almost exclusively with "extremely limited and unimaginative types of cognition and memory"—mainly the formation and mechanical retention of "semantic units of information." "Considerably more is needed in the exercise of other products—classes, relations, systems, and transformations"; it is these that "make information significant." Critical thinking calls for the development of "evaluation," creative thinking for the development of "divergent production."

Throughout the book one or more references are cited for almost every factual statement. A valuable bibliography is appended, running to over a thousand numbers. British work as well as American is amply covered, but Binet and Piaget are the only continental writers discussed in detail.

In this volume we thus have for the first time a systematic and comprehensive treatment of the whole problem of intelligence, and a treatment that is admirably up to date and fully in keeping with an age of automation, high-speed computers, and information-study, and with the theoretical and technological insights that these new developments have imparted.

The Therapist Interprets the Message

Ernst G. Beier

The Silent Language of Psychotherapy: Social Reinforcement of Unconscious Processes. Chicago: Aldine, 1966. Pp. xiii + 338.

Reviewed by CHARLES D. SPIELBERGER

The author, Ernst G. Beier, after receiving his PhD in 1949 from Columbia, taught at Syracuse where he was also

Director of the Mental Hygiene Clinic. For the past 15 years, he has been at the University of Utah where he is currently Professor of Psychology and Director of the Clinical Training Program. He is an ABEPP Diplomate in Clinical Psychology, an experienced and talented psychotherapist, and an avid skier.

The reviewer, Charles D. Spielberger, a 1954 Iowa PhD, has taught at Duke and at Vanderbilt. He is currently Professor of Psychology and Director of the Clinical Training Program at Florida State University. An ABEPP Diplomate in Clinical Psychology with research interests in anxiety and verbal conditioning, his publications include Anxiety and Behavior (CP, Dec. 1967) and Contributions to General Psychology (1968). He is also the editor of a new series entitled, Current Topics in Clinical and Community Psychology, that will be initiated in 1969.

THE major thesis in this volume is that psychotherapy consists of a communication process in which patient and therapist engage in a mutual exchange of information. By examining the patient's messages, a therapist can discover the unconscious motives and the sources of reinforcement that sustain maladaptive behaviors. By responding to the patient's messages with asocial, "disengaged responses," i.e., responses that do not provide the reinforcements that are expected by the patient, the therapist makes the patient feel uncertain about his present behavior and helps him to explore other alternatives.

In proposing a communication model for psychotherapy, the author's general aim is to bring about "a marriage between Skinner and Freud" through the formulation of reinforcement principles that are sophisticated enough to account for complex human behavior. In the first half of the book, the communication model is introduced and its application to one-to-one psychotherapy is examined in detail. The remainder of the book consists of a discussion of applications of this model to other forms of therapy and consultation, comments on special problems encountered in the training of psychotherapists, and a brief

survey of therapeutic goals and needed research on psychotherapy. A useful list of references on psychotherapy research is also provided, along with an annotated bibliography on important models in psychotherapy.

A CENTRAL ASSUMPTION in the author's analysis of human communication is that almost all messages are sent with the purpose of producing responses in others that are favorable to the wishes of the sender. Two types of messages are distinguished: persuasive messages in which the manipulative intent is under the conscious control of the sender, and evoking messages in which the sender is unaware that his unconscious motives are being expressed. In both types of messages, the emotional impact is conveyed by covert and subtle cues that create in the respondent an emotional climate that is favorable to the sender's intent. This use of language and covert cues to manipulate the behavior of others is learned early in childhood as a means by which hidden wishes and needs can be at least partially satisfied without risking failure or rejection. The goal in psychotherapy is to help the patient become aware of his covert communications so that he can deal with his unconscious needs in a more effective manner.

Throughout this book, there are lucid and interesting examples taken from the author's own experience in psychotherapy and consultation. The materials relating to special applications of the communication model to family therapy, group therapy, and to therapeutic consultation with parents, teachers, and representatives of different professional groups, reflect important extensions of the traditional roles of psychologists as therapists, as well as significant innovations in therapeutic techniques.

IN the case materials that are reported, the author's sensitivity, as well as his therapeutic experience and skill, is readily apparent. But his limitations as a learning theorist are also clearly revealed. While the translation and application of Freudian concepts is highly sophisticated, the promised marriage be-

tween Skinner and Freud is never really consummated. There is only passing reference to the relevant literature on verbal conditioning and little concern with the variables that are traditionally investigated by descriptive behaviorists. It would seem that cognitive learning theory and information theory would be more compatible than Skinner with the communication model that is proposed, but the potential contribution of these fields to a better understanding of the psychotherapeutic process is not considered.

Coverage of the field of psychotherapy is not comprehensive enough for this volume to be appropriate as the main text for courses on this subject. However, the analysis of the communication between patient and therapist that occurs in psychotherapy is sufficiently intriguing to make it useful as a supplementary text for both graduate and advanced undergraduate students. The book will also be of interest to the experienced therapist, not only for its relatively unique orientation and excellent case materials, but especially in terms of the information it provides on innovative roles for psychologists as behavior consultants with families and with members of other professional groups.

... the individual who wishes to have an answer to the problem of evil, as it is posed today, has need, first and foremost, of self-knowledge, that is, the utmost possible knowledge of his own wholeness. He must know relentlessly how much good he can do, and what crimes he is capable of, and must beware of regarding the one as real and the other as illusion.

—C. G. JUNG

Suicide in Armageddon

Edwin S. Schneidman (Ed.)

Essays in Self-Destruction. New York: Science House, 1967. Pp. xviii + 554. \$12.50.

Reviewed by IRVING SARNOFF

The editor, Edwin S. Schneidman, is Chief, Center for Studies of Suicide Prevention, NIMH. He formerly was co-director with Norman Farberow, of the Los Angeles Suicide Prevention Center, serving in that capacity from its inception in 1958 until September 1966. He is co-author with Farberow of several books including *Clues to Suicide*.

The reviewer, Irving Sarnoff, is Professor of Psychology, NYU. His PhD is from the University of Michigan. After a year as a Fulbright Scholar at University College, London, he taught at Yale and at Western Reserve, where he was Director of the Research Center of the School of Applied Social Science. He is author of *Personality Dynamics and Development and of Society with Tears*.

YEAR AFTER YEAR, in this acutely troubled land, the rates of all traditional categories of social pathology have been rising alarmingly. And new varieties have recently erupted with incendiary force. But our country's reaction to these harrowing developments has generally been to regard them as anomalous growths in a basically wholesome social organism. It has not yet occurred to many Americans that crime, mental illness, drug addiction, and riots are diverse symptoms of a society whose fundamental values and institutions are inherently devastating.

Consequently, we usually wait until

these symptomatic eruptions reach the magnitude of an undeniable plague. Then, we rush to establish separate Centers for their study and management, staffing them with specialists who are supposed to discover the presumably unique determinants and modes of amelioration differentiating each outcropping of misery from the others.

This conceptually deficient and socially futile strategy has also characterized the American approach to suicide. Certainly, this is painfully evident in the scope and the contents of this book. For the twenty-four papers in this collection, as well as the Preface and the Foreword, were written by people who have been in some way connected with the Los Angeles Suicide Prevention Center.

Despite this flagrant parochialism, the combined wisdom of the contributors is impressive. Nor is it difficult to share vicariously the editor's irrepressible pride in the Center's decade of good works. Indeed, it is very heartening to learn that practitioners and scholars of the caliber represented here have participated in the Center's courageous attempts to fathom and to forestall the profoundest depths of human despair.

Nevertheless, the book's institutional chauvinism has seriously diminished its intellectual perspective. True, a fairly wide range of disciplines is on hand: anthropology, history, pathology, philosophy, psychiatry, psychology, and

statistics. Moreover, the methods of inquiry include literary criticism, ethnographic analysis, psychoanalysis, metaphysical speculation, the correlational survey, and even an experimental study of mice. But a crucial selective factor was operating, however inadvertently, to insure a considerable degree of consensus in the midst of substantive and epistemological diversity. Thus, as Dr. Schneidman ruefully acknowledges, none of his contributors chose to deal with the "topic of global self-destruction." Nor, it should be added, did any of them grapple with its national virulence.

IN SHORT, the book tends to define its problem in a rather constricted and conventional manner. With respect to the etiology, treatment, and prevention of self-inflicted death and injury, emphasis is placed on characteristics of the individual who assails himself: his personality and motivational conflicts, his familial history, his status and role in society, and the vicissitudes of his interpersonal relations and occupational strivings. And the book's strength lies in the high competence its authors bring to these concerns.

In one notable instance, professional skill is combined with sufficient verbal facility to produce an essay worthy of that genre's classical tradition. For Henry Murray opens the volume with a beguiling and beautifully wrought discourse on the despondency that shrouded the last forty years of Herman Melville's life. Murray's prose is such a delight to read that his portrayal of Melville's Oedipal complex—with its postulated guilt and insatiable yearnings—sound almost like a hitherto unuttered insight into that author's malaise. And one is quite prepared to overlook the fact that Murray neglected a mundane, but perhaps extremely important, reason for much of Melville's depression: the failure of his masterpiece, *Moby Dick*, to make a significant impact upon the public of his time.

Sadly, the rest of the contributors cannot match the grace and elegance of Murray's style. Still, many of their papers warrant careful reading for their ingenuity and interest. Kresten Bjerg, Warren Breed, Neil Kessel, Mamoru

Iga, and Paul Friedman are especially keen in searching for retrospective clues to the causes of suicide in a variety of materials: suicide notes, interviews with people who knew the suicide, survivors of attempted suicide, clinical tests, and sociological data.

These investigators admit that their studies are flawed by gross inadequacies in control over the variables examined. Yet most of their conclusions seem wholly reasonable, if not especially surprising. For example, it appears that persons who commit suicide have often shown other signs of deep emotional disturbance prior to their fatal actions; that they have often suffered shattering losses as immediately precipitating factors (males are shown more frequently than females to have lost a position, whereas females have more frequently lost intimate social relationships); that they have experienced helplessness and hopelessness; that they derive in greater proportion from the lower socio-economic classes than from the upper classes.

ATTEMPTS to prevent suicide have also stimulated technical innovations, as Norman L. Farberow illustrates in stressing the vital function of the telephone as a lifeline between the potentially suicidal caller and the therapist. Similarly, therapists working intensively with patients of suicidal inclination have been moved to clarify or to revise their initial conceptions about that phenomenon. Avery D. Weisman, utilizing case materials, offers a clarification of the psychoanalytic hypothesis concerning the relationship between self-destruction and sexual perversion. Also theorizing within the psychoanalytic framework, Robert E. Litman combs through Freud's original writings on suicide and summarizes his gleanings in a systematic list. Norman Tabachnick, on the other hand, while beginning his clinical exploration of victims of fatal accidents with an orthodox Freudian orientation—seeing the catastrophes as manifestations of a death instinct—was led “into a different theoretical pathway.” Eventually, he began to think that some of these accidents might arise “when persons with a potentiality for

‘action’ ways of life encounter anxiety-filled and temporarily overwhelming responsibilities.”

Intriguing as these careful siftings of idiosyncratic patterns of self-destruction may be, they cannot help us to understand or to prevent the massive assaults that millions upon millions of Americans have made—or have permitted to be made—upon their existence. Every day, legions of chronic drinkers are irrevocably dissolving their brains in alcohol. Multitudes of smokers persist in their habit, although they are fully aware of its cancerous portents. Are not these deadly foibles alone a basis for wondering why our people do not have more respect for their lives?

ACTUALLY, the least dramatic but most prevalent form of passive suicide is committed by Americans in our society's lowest classes and castes. For these victimized people, unjustly deprived of the wherewithal to sustain their physical well-being, die considerably sooner, on the average, than do their more advantaged compatriots. Is it not self-destructive for impoverished people to acquiesce in the sociological murder that is daily being inflicted upon them? Surely, it is equally suicidal, in the long run, for more affluent Americans to invite violence against themselves by refusing to grant the rightful demands of those who are wedged into the bottom of our societal hierarchy of invidious distinction.

In this book, a reader will find scant elucidation of those basic and encompassing social origins of self-destructiveness that menace the survival of every American; and that are as threatening to inhabitants of all modern societies, whose most cherished and influential aspirations are similar to ours. Only one contributor, Gerald Heard, points toward the essence of our undoing in remarking that our society “has all its values fixed on the prepsychological prizes, goals, and ends of an immature animal.”

Yes, America's dominant values—wealth, power, and prestige—inevitably foster greedy megalomania and a dehumanized indifference to its social and personal consequences. For people goaded

by aggressive egoism are impelled to extract from others whatever their ambitions require. And they are not likely to spare their own bodies or sensibilities in piggish contests for grander and grander places in the common wallow.

Paradoxically, therefore, Americans—and their counterparts in the contemporary world—will go on destroying themselves as long as they pursue the values they have been taught to revere, and as long as they preserve the social, economic, legal, educational, and political institutions that have articulated and reinforced those values. Clearly, these values and institutions ought to be replaced by ones that would encourage the realization of our distinctively human capacities, holding forth humanitarian, equalitarian, intellectual, and esthetic objectives as the surest paths to a fulfilling and harmonious future for our psychological species.

People who dwell in the most powerfully destructive countries on earth have the greatest incentive to take the initiative in beginning this lifesaving task of social reconstruction. Let us fervently hope that they have not become so alienated from their own humanity as to prefer, instead, to organize an International Center for the Study of Doomsday, with Dr. Strangelove in charge.

Broad and Narrow

John F. Corso

The Experimental Psychology of Sensory Behavior. New York: Holt, Rinehart & Winston, 1967. Pp. xii + 628.

Reviewed by WILLARD R. THURLOW

The author, John F. Corso, received his PhD from the State University of Iowa and has taught at Pennsylvania State University and St. Louis University. He is now Professor of Psychology and Chairman of the Department of

Psychology at the State University of New York, Cortland. His research is in the areas of auditory threshold, obtained with both sonic and supersonic stimuli, and of quantal effects in auditory perception.

The reviewer, Willard R. Thurlow, received his PhD from Princeton University and has taught at the Universities of Missouri and Virginia. He is now Professor of Psychology, University of Wisconsin. His chief interest has been in perception, more particularly in auditory perception.

PROFESSOR CORSO set out to write a textbook in experimental psychology in which he restricted the topics primarily to general research methodology and sensory processes. Immediately, then, he was faced with serious problems of how to combine and relate these two kinds of topics—the broad and the narrow. The problem of organization has remained as a central one for the reader.

Part I is entitled "Foundations of Psychology," and includes chapters on "The Philosophy of Science," "The Physical Environment," "The Human Nervous System," and "The Human Receptor Systems." While some of the many facts given on the physical environment, nervous system, and receptor systems are fascinating, others seem irrelevant to the purpose of the book. For instance, details are given on neuroanatomical technique, on techniques for electrical stimulation of the brain, and on brain anatomy, that have no relation to other topics discussed in the book.

Part II is entitled "Quantitative Methods in Psychological Research," and starts with a chapter on "Theories, Measurement, and Behavior." The writing is very abstract, in common with that of the very first chapter of the book on "The Philosophy of Science." It would have been improved by the use of more illustrations.

In the other two chapters of Part II we come to some carefully presented procedures. One chapter presents psychophysical procedures, and another presents the elements of carrying out statistical tests on data. "Ratio-scaling" procedures are illustrated clearly; but certain other important scaling pro-

cedures (such as "Equal-Appearing Intervals") are not discussed at all.

WITH Part III, Corso returns to detailed data, this time mainly behavioral, and discusses absolute and differential thresholds, adaptation, and sensory malfunctions. While some physiological processes are related to behavioral data, neurophysiological evidence based on single-unit recording is not brought in. There are many kinds of perceptual discriminations that are not treated, apparently because they are not regarded as "sensory."

Finally, in Part IV, Dr. Corso turns to more general theories—classical theories of sensory discrimination, signal detection theory, information theory, and adaptation level theory. His presentations of these theories are useful, and should prove of value as an introduction for the student. The lecturer would need to supplement material given in the book, to clarify certain points, and to provide additional critical evaluation of these theories.

So far, in this review, we have perhaps tended to emphasize shortcomings. But we should point out that there are a number of positive features in this book. One is impressed, in general, with the care with which it was written (and the labor involved in gathering all of this material together). The typography is excellent. If one picks and chooses, one can find valuable sections on stimuli and receptors, and valuable data on thresholds and adaptation. We have already noted the useful sections presenting basic features of classical discrimination theory, signal detection theory, information theory, and adaptation-level theory. Thus, this book can be used to supplement other current textbooks of experimental psychology that may be lacking in one or more of these areas.



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Unravelling the Mind-body Tangle

Herbert Feigl

The "Mental" and the "Physical": The Essay and a Postscript. Minneapolis: University of Minnesota Press, 1967. Pp. vii + 179. \$4.50 cloth, \$1.95 paper.

Reviewed by WILLIAM O'NEIL

The author, Herbert Feigl, is Regent's Professor of Philosophy and Director of the Minnesota Center for the Philosophy of Science. A distinguished philosopher, he has long shown a sympathetic interest in the philosophical underpinnings of psychology and is the author or editor of numerous publications dealing with the philosophy of science, including the Minnesota Series, Minnesota Studies in the Philosophy of Science.

The reviewer, William O'Neil, was for twenty years Head of the Department of Psychology at the University of Sydney, Australia. He is now Deputy Vice-Chancellor at the University of Sydney. He is author of four books: *An Introduction to Method in Psychology*, *A Guide to Elementary Statistics in Psychology*, *Beginnings of Modern Psychology*, and *Fact and Theory: An Aspect of the Philosophy of Science*.

LOGICAL POSITIVISM as formulated by the members of the Vienna Circle, of whom Feigl was one, had among its aims the separation of real problems from pseudo-problems. The former were those amenable to solution either by logical analysis or by empirical means, whereas the latter were seemingly problems not solvable in either of these ways. The traditional mind-body problem was frequently if not universally regarded by the logical positivists as a pseudo-problem. When many of them took refuge, some thirty years or more ago, in the United States and other

English-speaking communities, they were welcomed by behaviorists and other anti-mentalists who had already concluded that arguments about the mind-body issue were profitless and perhaps pointless.

For a long time Feigl seems to have had nagging doubts about so summary a dismissal of the problem. In his many English language contributions to philosophy, especially to the philosophy of science, he has returned again and again since 1934 to its consideration. His two most important statements were given in his 1950 essay in *Revue Internationale de Philosophie* and in his longer essay in *Minnesota Studies in the Philosophy of Science*, Vol. II, 1958. The present monograph is a reprint of the latter essay with an added postscript of 25 pages. The fact that a bibliography of 359 titles, many published from 1940 onward, was appended to the original essay, and that a list of 206 additional titles, published from 1957 onward, is appended to the postscript suggests that Feigl's was not a voice crying in the wilderness.

The essay is in part a review of recent thinking on the problem, or more strictly the problems, and in part an attempted solution of some of them. Its 116 pages make it rather long for an essay, yet in many ways it is too short for what it attempts to do. Feigl knows so much of what has been said on various aspects of the problem not only in the last quarter century but also in

the centuries before that he is faced with choosing between severe selection and brief reference. Therefore he presents his reader, especially if he is a psychologist, a very hard piece of reading.

A highly significant phrase is used as the heading for Section 11 of the essay: "the scientific and philosophical strands in the mind-body tangle." An important thesis is that there is not just one mind-body problem but many related problems. Another is that some of these are philosophical, to be resolved by logical analysis, and some are scientific, to be resolved by empirical means. A third thesis is that the various strands have been amazingly but not hopelessly tangled. Though he valiantly strives to disentangle them in the essay, Feigl needs the postscript for further sorting. For instance, the latter makes clearer the distinctions among the conceptions of mind as sentience (what we feel), sapience (e.g., intelligence), and intentional reference to objects and self-hood.

Feigl has little to say about the relation of mind as self-hood to the physical. He makes many interesting comments on mind as sapience. His main concern, however, is with mind as sentience. A disentangler is invited to select those strands in a tangle that he considers most important and that he believes he is most able to tease out. In concentrating on mind as sentience, on the relation of phenomena or "raw feels" to the physical, Feigl is addressing philosophers rather than psychologists. Though it would not do to underestimate the importance of the matters in dispute between S-R theorists, who are predominantly realists in epistemology (often without clearly recognising themselves as such), and the cognitive theorists, who are explicit phenomenologists, it may be said with fair confidence that the sapience and the self-hood issues are of greatest concern to contemporary psychologists.

FEIGL's proposed solution to the sentience problem asserts an identity, very carefully specified, between the 'mental

and the physical. The mental involved in this identification consists of "the states of direct experience that conscious human beings 'live through' and those that we confidently ascribe to some of the higher animals" and the physical consists of "certain (presumably configurational) aspects of the neural processes of those organisms" (p. 79).

American and British realists in the first quarter of this century, following leads given by Brentano, James and many others, made a distinction between the experiencing and the experienced. Feigl seems to identify the states experienced with neural processes. It appears to be more plausible to me to identify (or at least to correlate) them with physical events outside the nervous system (but sometimes inside the body). There are, of course, resultant problems in so identifying such noetically or cognitively experienced states as we have in memory, imagination, and hallucination and such orrectically experienced states as we have in feelings, emotions, and motives, but there is not space enough to recall here how the realist suggested that they may be resolved. The easiest is the perceptual state. I saw and admired the green and tan patterned cover of the paperback edition of Feigl's monograph. It seems more plausible to identify what I saw and admired with the physical properties of the cover and more plausible to identify my seeing and admiring that colored pattern with my neural processes. This, possibly naive, realist view virtually converts the sentence into the sapience strand of the tangle.

THE REALIST must recognise difficulties with intersubjective corroboration of reports about what is experienced. They are greatest where the reports are about aches, itches, pleasures, and pains. But the difference in difficulty of corroboration between reports about experienced (seen) red, (tasted) sour and (cutaneously sensed) warmth and reports about a spectrograph reading, a pH meter reading, and a thermometer reading seems one of degree and not one of kind. My reported reading of a pH meter is no less a report of a

'raw feel' than my report of what I experience when I squeeze a slice of lemon on my tongue. The former is, of course, less variable when external conditions seem invariant than is the latter. Two readers of one pH meter will also give more consistent reports than will two naked tongue observers of lemon juice. Nevertheless both of the observers may be investigated as acidity meters as readily as a pH meter may.

It could be that there is no empirical way of deciding between the realist view just presented on the sentence issue and Feigl's view. Little more has been done here beyond claiming greater plausibility. If there is no decisive empirical way, then this strand of the tangle is a pseudo-strand.

Any psychologist willing to grub around the foundations of his subject can only be grateful to Feigl for his sorting out of the strands in the mind-body tangle, for his proposed solutions and for his listing of what he calls "a budget of unsolved problems." This gratitude should be no less even if the psychologist does not agree with Feigl's analyses and solutions. Sooner or later, if the psychologist is inclined to theorize, he will need to make judgments about the ground on which his subject stands, about the relation between 'phenomena' and 'behavior' and about the relation of both (if they are judged different) to biological and physical events. The psychologist who theorizes but who says he does not need to make these judgments betrays in the long run the fact that he does, even if only implicitly.



*How can you gather together
the thousand fragments
of each person?*

From: *Sixteen Haiku*
—GEORGE SEFERIS



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James Leslie McCary, University of Houston and Director of Psychological Services, Alameda Clinic, Houston, Texas. 1967, 374 pages, \$8.50.

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Psychotherapy: Broad but Infirm View

Lewis R. Wolberg

Psychotherapy and the Behavioral Sciences: Contributions of the Biological, Psychological, Social and Philosophic Fields to Psychotherapeutic Theory and Process. New York: Grune & Stratton, 1966. Pp. vi + 198. \$6.75.

Reviewed by JOHN M. BUTLER

The author, Lewis R. Wolberg, MD, is Dean and Medical Director of the Postgraduate Center for Mental Health and Clinical Professor of Psychiatry, New York Medical College. He is also author of *Short Term Psychotherapy*, *Hypnoanalysis*, and a two-volume work, *Principles of Hypnotherapy*.

The reviewer, John M. Butler, received his PhD from the University of Minnesota in 1949. He has been a member of the faculty of the University of Chicago and of the staff of the University of Chicago Counseling and Psychotherapy Research Center for 20 years. His interests are chiefly in the study of personality as revealed in the psychotherapeutic interactions. Collateral interests are the logical nature of exploratory research and memory for spontaneously produced speech.

PSYCHOTHERAPISTS have some reason to take pride in the fact that theories of mind and personality based on the psychotherapeutic interaction have influenced man's view of his own nature and have had direct influence on art, literature, and several of the sciences. Nevertheless a certain parochialism attends their pride. Many psychotherapists are not directly influenced by theory and research in the biological and behavioral sciences although some claim, somewhat unconvincingly to be sure, to derive strictly their theory and

practice from various theories of learning or of conditioning. It is not difficult to come by the impression that many psychotherapists contemptuously reject theories and research not based on the therapeutic situation, feeling no necessity to ascertain what bearing psychology and other fields may have on the theory and practice of psychotherapy and on the understanding of personality.

The psychotherapist who is receptive to the possible contributions of the biological and behavioral sciences to his understanding of human beings may open this book, the subtitle of which is *Contributions of the Biological, Psychological, Social and Philosophic Fields to Psychotherapeutic Theory and Process* with anticipation. He will be disappointed. The psychotherapist who is not receptive will have his prejudgments confirmed. The author has attempted to cover subjects ranging from biochemistry, neurophysiology, and neural conditioning to stress, learning, psychoanalysis, personality development, social theory, cultural anthropology, communication theory, philosophy, values, and religion in terms of their application to psychotherapy. But his grasp has not encompassed his reach.

It seems to this reviewer that one can only attempt to delineate the contributions, actual and potential, of so many sciences to the theory and process

of psychotherapy by synthesizing an enormous range of concepts and findings. When such a synthesis is attempted within the compass of 170 pages with a mean chapter length of 14 pages and a range of chapter length from 7 to 23 pages, the intellectual energy required for the compression seems analogous in magnitude to the physical energy required to produce a dwarf star. This amount of intellectual energy has not been expended. The book is neither synthetic nor synoptic. The reader who is not well informed needs more information in order to be enlightened; the reader who is, will not be.

THE DIFFICULTIES encountered by a reader can be envisaged by considering the treatment of learning theory and its applications to psychotherapy. As is true for other subjects, thousands of papers and hundreds of books have been written. There must be a selection and the author chooses to rely on Skinner, Dollard and Miller, and Hilgard. Operant conditioning is said to be motivated by drives in the form of tissue needs and aversive stimuli. The responses successful in satisfying the tissue need or in removing the aversive stimulus will tend to be repeated whenever the motive recurs. The interpretation of operant conditioning goes on in this fashion. This somewhat novel view of operant conditioning, with some difficulty, can be overlooked but it becomes more difficult when one finds the application of learning theory to psychotherapy expressed in terms of what therapists do; what they do is to "undermine," "encourage," "exhort," "point out," "reprimand," etc. The connection between constructs grounded in behavior and learning theory and these underminings, reprimandings, exhortings, and encouraging is not made clear. Furthermore the author seems not to know that responses, not stimuli, are reinforced and extinguished. Thus the following statement: "If a conditioned stimulus is not reinforced, the magnitude of the conditioned response will progressively diminish and the response will ultimately disappear." This hopelessly confuses the reinforcement value of a conditioned stimulus with the con-

ditions under which the probability that a given conditioned stimulus will elicit a given response is progressively decreased.

Finally, and crucially, the extensive and important literature in physiological psychology showing that needs and drives do not have a one-one relationship with the reinforcement process is not considered. There is much and increasing evidence that weak stimuli may have intrinsic reinforcing value; that is, may as such be unconditioned stimuli serving as primary reinforcers in their own right, and that neural patterns leading to reinforcement can be created directly without sensory stimulation. This reviewer would suggest that the present state of knowledge renders it more plausible to suppose that the events we call imaginings and conceptualizings are directly reinforcing than to take the view that the majority of human responses are dependent directly and indirectly upon primary drive reduction, upon primary reinforcements attendant upon sensory stimulation, or upon the operation of Freud's version of the pleasure principle. That is to say, it is now possible to envisage in outline how mental life, mental processes, insofar as they are associated with, or are a phase state of, ongoing neural patterns, are directly reinforcing. The implications are enormous both for our view of human nature and for our understanding of the therapeutic process. For example, it can be said plausibly that a therapist could stimulate a patient by employing a figurative language and that this stimulation could be directly reinforcing and lead to self-engendered figurative conceptualizing processes themselves directly reinforcing. We can now see, in a manner consistent with basic research, how the higher mental processes may be viewed as direct reinforcing agents and how they may govern the behavior of the person, being only contingently dependent upon primary drive reduction.

We have finally arrived at the point at which fundamental research has a direct bearing upon our understanding of human nature and of psychotherapeutic process. Furthermore, current experimental work implies that Freud's views on the pleasure principle and on the

nature of the higher mental processes are fundamentally erroneous. Psychotherapists, personality theorists, and human motivation theorists can now ignore fundamental research only at the risk of serious intellectual error.

What I have said about the treatment of learning and the failure to connect relevant and basic research on psychophysiology to learning and to psychotherapeutic process could be said about the other subjects covered in this book. Whatever it does, it does not delineate the contributions of the fields covered to our understanding of the theory and process of psychotherapy.

British Assessment

John C. Raven

Psychological Principles Appropriate to Social and Clinical Problems. London, England: H. K. Lewis, 1966. Pp. xx + 187. 25s. net.

Reviewed by ROBERT N. SCHNEIDER

John C. Raven, author of the book reviewed here, is now retired as Director of the Department of Psychological Research, Crichton Royal Hospital. He is well known for his testing techniques.

The reviewer, Robert N. Schneider, is now in private practice in St. Louis. Formerly he was Coordinator of Psychological Services, VA Hospital, Jefferson Barracks, St. Louis.

JOHN RAVEN is perhaps known best to psychology for his work in evaluation. His Progressive Matrices Test has been in use for a good number of years. However, I suspect that a wider knowledge of his work, interests, viewpoints, etc. is available only to the reader of the little volume that is the subject of this review. The prologue of the book is a transcript of an interview with Raven on the occasion of his retirement after

some 21 years as Director of Psychological Research at Crichton Royal, a psychiatric hospital; it provides an interesting personal glimpse of Raven's work and career. It also provides a statement by Raven of his purposes for writing the book: "I have tried to bring together our enquiries and to show the principles underlying them. I have tried to describe how I think about behaviour and how I think we can compare one form of behaviour with another" (p. xix). In the reviewer's opinion, Raven has done an admirable job of accomplishing his objectives.

Raven's book will appeal to psychologists for a number of reasons. To those who are familiar with his work in psychological evaluation, the book will be of interest because the author describes the ways he has developed to use his techniques in assessment. Approximately the first third of the book is devoted to the "practical problems" of the clinician, i.e., assessing behavior from interviews and testing procedures. This section might be particularly valuable to graduate students at the point of beginning a clinical practicum.

OF greater interest to experienced clinicians will be the remainder of the book, which presents the theoretical principles underlying the research and techniques that Raven has developed. These principles derive most clearly from Gestalt concepts, especially those of Lewin and field theory. He has developed a "framework of reference" for conducting interviews and analyzing data, utilizing four co-ordinates: attention, intention, valuing, and ordering. In light of the current interest among many mental health workers in replacing the "illness model," Raven's distinctly psychological approach should be of some interest. As he puts it, "We may never reach agreement as to what constitutes a 'psychotic personality' or as to what produces a 'neurotic illness.' We do, however, find people who have disturbances of attention or show inadequate intentions determining their actions. We also find characteristic differences in the things people value and in their capacity for orderly thinking. Along these four co-ordinates of a person's behaviour and

experience, a psychologist can at least demonstrate group similarities and individual differences in people's responses to events and show how they are related with ascertained organic conditions and social factors" (p. 98).

In chapters discussing each of his four co-ordinates, Raven lists the kinds of questions that must be answered about a person if the examiner is to build a picture of how these co-ordinates are defined and organized by that person and thus serve as determinants of his experience and behavior. An attempt such as this to organize in a systematic way these important and highly complex aspects of behavior deserves consideration.

There are other facets of the book that make it of interest that can be only mentioned: Raven's "method of compared matching," his scheme for assessing mental impairment, his conviction that any transaction between a psychologist and another person occurs in the context of a reciprocal relationship and must be so considered, his views on what clinical psychology should be, on psychotherapy, etc.

In sum, the author has succeeded in his purpose of presenting what he has to say to, for, and about psychology: its orientation, its goals, and its methods. That he has done so in a clear, concise, and very readable fashion only makes it easier to endorse the book.



This indeterminacy is, of course, partly due to . . . the radical ambiguity of a profession in which one is hired for one purpose, expected to carry out another, and prized for achieving a third: teaching, research, prestige are independent variables, besides being incommensurable per se. The upshot is as lively a set of anxieties . . . as one could hope to produce.

—JACQUES BARZUN



The Injured Innocents

Robert Coles

Children of Crisis: A Study of Courage and Fear. Boston, Mass.: Little, Brown, 1967. Pp. xiv + 401. \$8.50.

Reviewed by HENRY W. RIECKEN

The author, Robert Coles, majored in English literature at Harvard before taking a medical degree at Columbia and a psychiatric residency in Boston. Currently a member of the Harvard University Health Service staff, he is working on material he has gathered about migrant farmers, sharecroppers, and mountain families in Appalachia, as well as doing research in Boston on "a ghetto with Northern problems" that "will eventually become Volume 3 of Children of Crisis."

The reviewer, Henry W. Riecken, is a Harvard-trained social psychologist who has taught at Harvard and the University of Minnesota, was formerly an Associate Director of the National Science Foundation and is currently serving as Vice-President of the Social Science Research Council, in charge of its Washington office.

IN 1958 Dr. Coles, with a psychiatric residency in Boston behind him, began serving a two-year tour at an Air Force base in Mississippi. He gradually became aware of Southern treatment of Negroes, but it was witnessing a 'racial incident' that precipitated his acute concern and involvement in the process of desegregation. During the rest of his military duty and for several years thereafter, Dr. Coles carried on a longitudinal study of individuals who were directly affected by desegregation. He began by making the acquaintance of families whose children were the first to enter newly desegregated schools in New Orleans and Atlanta, and fol-

lowed them over a period of several years. He went on to make contact with teachers in the schools where integration was taking place, and then to work with the members of protest movements from both North and South. Finally, he studied integrationists and last-ditch resisters from the South. Long interviews (tape recorded) with children and adults, both Negro and white, provided the basic material for analysis and reporting.

There is, in fact, very little analysis in any formal sense. Rather, Coles has produced a moving, informative, and convincingly detailed set of portraits of real people caught in a real bind that somehow does not overwhelm them though it threatens to. His documentation of their courage, their persistence, their defiance—ranging from noisily open to quietly hidden—is perceptively chosen from the many hours of interviewing, as are the illustrations of the all-pervading fear that makes new forms of association between whites and Negroes uncomfortable (or worse) for both. Listen to an account by a white Southern schoolteacher, gone North to New York for summer school study, of her first intimate contact in a dormitory with a Negro as a peer:

"'It may seem strange to you,' was the way she began to tell me about an episode of her life that had happened long ago, fourteen years to be exact. She paused, then she started again. 'It may seem strange to you that a teacher like me would react to a nigger woman

like I once did, but since then I've talked with a lot of people about it, and it's a more common occurrence than you'd think. I'll never quite forget the second it took place. It was an ordinary morning and I was coming out of the shower when suddenly I saw that nigra woman. There were several showers and she was standing there, drying herself. She had just come out herself (I thought about that later, you know) and we were probably taking showers at the same time. Anyway, she came out of hers just a few seconds before I came out of mine. When I saw her I didn't know what to do. It was as if I'd seen the Devil himself, or I was about to face Judgment Day. I felt sick all over, and frightened. What I remember—I'll never forget it—is that horrible feeling of being caught in a terrible trap, and not knowing what to do about it. I thought of running out of the room and screaming, or screaming at the woman to get out, or running back into the shower. My mind was in a terrible panic; I thought of everything I could do at once, but I felt paralyzed. I felt like fainting, and vomiting, too; it was shock, like seasickness; it took hold of me all over and I wondered whether I was about to die. My sense of propriety was with me, though—miraculously—and I didn't want to hurt this woman. It wasn't *her* that was upsetting me. I knew that, even in that moment of sickness and panic. Then I came to my senses. I realized I had to do something; but all I could do was just stare at her. I must have looked as pale as a sheet. It seemed like an eternity, though it probably was only a few awkward seconds. Finally, I jumped back into the shower and stayed there, listening for her to go and thinking about it all where I *could*, because I felt safer. It was awful" (pp. 149-150).

THE FEAR is just as strong, though much more realistic on the other side. The mother of a little girl who was among those to break the segregation barrier in school says:

"I guess we all don't like white people too much deep inside. You

could hardly expect us to after what's happened all these years. It's in our bones to be afraid of them and bones have a way of staying around even when everything else is gone.

We have to live with one another, black with white I mean. I keep on telling that to the children, and if they don't seem to learn it, like everything else I have to punish them to make sure they do. . . . Just the other day my Laura started getting sassy about white children on the television. My husband told her to hold her tongue and do it fast. It's like with cars and knives, you have to teach your children to know what's dangerous and how to stay away from it, or else they sure won't live long. White people are a real danger to us until we learn how to live with them. So if you want your kids to live long, they have to grow up scared of whites; and the way they get scared is through us; and that's why I don't let my kids get fresh about the white man even in their own house. If I do there's liable to be trouble to pay. They'll forget, and they'll say something outside, and that'll be it for them, and us too. So I make them store it in the bones, way inside, and then no one sees it. Maybe in a joke we'll have once in a while, or something like that, you can see what we feel inside, but mostly it's buried" (pp 66-67).

Participants in desegregation have the feeling that somehow the ground is moving under their feet—they are being impelled into a situation very few of them would have chosen, but many refuse to avoid, unpleasant as it becomes. In some cases the individual, parent or child, did not anticipate the enduring hostility, the savage insults, the unrelieved resistance, but, having become caught up in the situation became also convinced that it would be a breach of faith with his own principles to withdraw from it. Others had less noble motives, like the white mother who refused to pull her children out of a newly integrated school despite her white neighbors' urgings: ". . . to tell the truth the idea of having four children home with me, squabbling and making noise and getting into trouble, was too much for me. So I thought I'd

just stick it out and maybe things would quiet down, and then we'd all forget one little nigra and our children would go on with school" (p. 277).

The greater part of this book is data, not quite raw, but under-conceptualized. The last three chapters, on the meaning of prejudice, and of race, are anecdotal and richly illustrated with case material. There is none of the paraphernalia of social research—no theorizing, no statistical analysis, no description of method or of "sample", and no pretense of representativeness. In fact, it is not clear just how many people Coles interviewed, for how long and over what span of time. The book is almost journalistic in its plainness and its reliance on direct reporting. It is free of psychoanalytic terminology and of speculation about the "deeper" portions of the personality. Yet its pages carry the mark of a trained observer whose judgment of relevance is sure, whose sympathies are clear but broad, and whose objectivity is untainted by moralizing. There are no grand conclusions, either, but, if the book has a message it is probably best put in the words Coles attributes to one of the teachers he studied. "We grow up," she said, "with certain ideas, and you can't shake them in a second." Feelings about race are deep and silent parts of a person. They do not respond to laws but only to new experiences" (p 150).



Scientists work best in small independent cells with a minimum of administrative responsibility and they especially resent the centralization of authority which is basic to any military organization.

—W. H. BARTON



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A Little Cube of Sugar Helps the Medicine Go Down

Richard C. DeBold and Russell C. Leaf (Eds.)

LSD, Man, and Society. (A Symposium, Wesleyan University, Middletown, Conn., March 1967.) Middletown, Conn.: Wesleyan University Press, 1967. Pp. xii + 219. \$5.00.

Reginald G. Smart, Thomas Storm, Earle F. W. Baker, and Lionel Solursh

Lysergic Acid Diethylamide (LSD) in the Treatment of Alcoholism. (Brookside Monograph of the Addiction Research Foundation No. 6.) Toronto: University of Toronto Press, 1967. Pp. xii + 121. \$6.00.

Reviewed by WILLIAM A. HUNT

The editors of the first book, Richard C. DeBold and Russell C. Leaf, are colleagues in the psychology department at Wesleyan University where they currently share a mutual research interest in brain chemistry. DeBold obtained his PhD from the University of California, Berkeley in 1963, and Leaf from Pennsylvania in 1965. The authors of the second book, Reginald G. Smart, Thomas Storm, Earle F. W. Baker, and Lionel Solursh, are collaborators in the research project reported here conducted under the auspices of the Addiction Research Foundation in Toronto where Smart is currently Research Scientist and a Lecturer at York University. Storm was formerly a Research Scientist at the Foundation but currently is Associate Professor of Psychology at the University of British Columbia. Baker and Solursh are psychiatrists at the Toronto Western Hospital. All are sophisticated researchers in the fields of alcoholism and LSD.

The reviewer, William A. Hunt, is Professor of Psychology at Loyola Uni-

versity, Chicago. For years, he taught at Northwestern University. He is a past president of Divisions 2 and 12 of the American Psychological Association and in 1967 received an award for his "distinguished contribution to Clinical Psychology" from Division 12. Currently he teaches a seminar on the psychology of addictions and conducts research in the areas of tobacco and alcohol habituation, areas in which his friends will recognize his long standing interest.

THE HISTORY of a drug from its original discovery through its experimental development to its final controlled therapeutic application is usually prosaic. Occasionally the ugly question of unanticipated side effects may raise its head and temporarily attract public notice, in the case of thalidomide quite dramatically. However, few of us who, in the post-war years, knew lysergic acid diethylamide (our old friend LSD) as a psychotomimetic drug offering a possible research potential in the experimental investigation of schizophrenia,

would have predicted that it would become the glamour drug of the middle sixties. Hallucinogenic love child of the intelligentsia, its use naturally spread to colleges and then to high schools; and its largely white, English speaking, educated middle and upper-middle class proponents offer a sharp contrast to the predominantly black or non-English speaking ghetto minority use of heroin.

The Wesleyan Symposium held in March 1967, and published in the same year, is an attempt to cut through the maze of misinformation and folklore surrounding LSD and to provide, in the words of Burton C. Hallowell, Executive Vice-President of Wesleyan University, "... a sober assessment of what we know about LSD—what we know confidently, what we know less than confidently, and what we do not know at all." All this "in terms that the intelligent layman can understand." The nine papers presented here fall roughly into three divisions, the biology of the drug, its relation to individual user, and its relation to society. Each of the papers, with the exception of Milton Joffe's remarks on governmental regulatory problems where it would be inappropriate and Barron's on motivation where it would be most appropriate, is accompanied by a suitable bibliography. In addition, Louria has added a helpful three-page classification of common hallucinogens, and Chayet a nine-page table of LSD legislative regulation in the various states.

The result is an informed, unusually readable, timely volume that fulfills its goals adequately. I would have said, "excellently," were it not for feeling that the social phenomena of LSD have been somewhat neglected here. A contribution by some knowledgeable sociologist such as Richard Blum would have helped immeasurably. Despite the speed with which it was published, the format is attractive, and the proofing obviously careful. It is a good book.

FRANK BARRON opens the section on the individual user with a paper on "Motivational Patterns in LSD Usage." To me, this is the weakest chapter in the volume, marked by the absence of hard data and reference to pertinent ex-

perimental literature. In all fairness, Barron cannot be said to proselyte for the use of LSD, but as Louria points out in a later section the difference between apologist and proselyter is a narrow one, and certainly Barron's treatment is more in the nature of an apologia than an impartial scientific evaluation. His closing paragraphs in which he hopes for "the possibility of a general change in human consciousness as a result of widely shared new experiences of the reaches of consciousness," is thoroughly laudable and shared by a large segment of the population but he still must face the economic question of "why LSD as a change agent?" It is typical of the drug apologist that any defense is usually built not around "why" but around "why not."

In a later section, Donald Louria discusses the abuse of the drug and argues potently for regulation and control of its use. One cannot help but wonder in May of 1968, whether Barron's hope and Louria's alarm are not out of place. LSD addiction is unusual and the single experience seems to be the rule. My impression is that the actual hallucinogenic experience is of less importance to the individual than the social and emotional context within which it is staged, and that the ingestion of LSD serves mainly as a convenient peg upon which to hang some "conversion" experience, much like some "contracts" that are used in laboratory training.

From where I sit (are universities still isolated from life?) I get the feeling that LSD is on the wane, is becoming "out of it," and that sensitivity training may well take its place. If so, our agonizing "hang ups" will no longer be about the side effects of drugs, and governmental regulation as an invasion of individual privacy, but about the limits and limitations of sensitivity training, and the tortuous question of whether the individual has the right to invade his own privacy by public self-revelation (much as suicide has been made illegal).

ALBERT KURLAND's treatment of the drug's therapeutic potential relies too heavily upon his Spring Grove Hospital experiences and overlooks negative evi-

dence, although the use of actual case materials provides a lively touch of reality. One misses not only the actual absence of any control group, but even more the absence of any felt need for one. Again, one may raise the question, why LSD? Granted some improvement in some cases, but how does the remission rate compare with other treatments? What is its cost, in dollars and cents, and in sequelae? These are questions that are valid and deserve an answer.

Walter Pahnke's chapter on "LSD and Religious Experience" is a workmanlike, competent product. Certainly an apologia, it nevertheless avoids proselyting and one finds here, in addition to a discussion of the part the hallucinogen plays in religion, some of the limitations revealed by the Spring Grove experience, namely the need for specialized training for maximal safety and the need for a careful selection of patients. Where he might well have been overly enthusiastic and uncritical, his closing words are for caution. "In spite of the dangers that are certainly potential in the use of this powerful tool, it has always been man's destiny to push ahead in order to increase his knowledge. This area is no exception, but those who undertake such research bear a heavy responsibility."

In addition to a brief discussion of the problems of governmental regulation by Milton Joffe, there is a long and fascinating chapter on the social and legal aspects of LSD usage by Neil L. Chayet. His coverage of the medico-legal problems is thorough and lively. In reading the legal tangles, off campus and on, occasioned by the problems of regulation, one is continuously struck by the fact that LSD seems only a minor protagonist in the struggle and that the real battle being fought is over individual control, the invasion of privacy, and, on the campus, such age-old problems as town and gown rivalries, and the administrative and faculty control of students as represented by the outworn phrase "in loco parentis" (or perhaps the phrase is still pertinent but parents need to grow up).

One thing is bothersome about the legal control of new drugs. It is easier to institute controls before use becomes

widespread, than it is afterward. If one is really interested in public health then surely it is obvious that had we known originally all that we do now about the side effects of tobacco and alcohol, we would have been much less permissive in our attitude toward them.

There is little to be said about the book's concluding section on the biology of LSD. With Nicholas Giarman writing on its pharmacology, Dominick Purpura on its neurophysiological action, and Murray Jarvik on the behavioral effects you have three old China hands performing, and, as would be expected, performing capably. One can only wish that some of the social advocates of LSD usage would give more consideration to the data presented by these three.

THE SECOND VOLUME, the monograph on LSD in the treatment of alcoholism is a refreshing antidote to parts of the Wesleyan volume. The four authors, Messrs. Smart, Storm, Baker, and Solursh here report the results of an experimental study of LSD in the treatment of alcoholism. They have a wide background in the field, and in addition to being thoroughly conversant with scientific methodology they have an emotional and intellectual commitment to it. The monograph contains a careful literature survey, an explicit description of the procedures used in their study, and a critical and unimpassioned statement of their findings.

In summary, they point out that as used in their investigation the LSD experience did not show itself to be an effective adjunct to the clinical treatment of alcoholism. In discussing further research they suggest investigating "the possibility that less dangerous drugs than LSD could provide many of its important effects."

Reviewer's opinion—a sane book in a psychotomimetic area.



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Persistence in Change or Predisposition to Change?

Theodore M. Newcomb, Kathryn E. Koenig, Richard Flacks, and Donald P. Warwick

Persistence and Change: Bennington College and its Students after Twenty-five Years. New York: Wiley, 1967. Pp. viii + 292. \$9.95.

Reviewed by ANN M. HEISS

The first author, Theodore M. Newcomb, is Professor of Sociology and of Psychology at the University of Michigan. Kathryn E. Koenig is Assistant Professor of Psychology at York University. Richard Flacks is Assistant Professor in the University of Chicago's Department of Sociology. Donald P. Warwick is Assistant Professor of Psychology at Michigan and also Program Associate in the Institute of Social Research. All three received PhD's from the University of Michigan.

Ann M. Heiss, the reviewer, is Lecturer in Higher Education, School of Education, and Assistant Research Educator, Center for Research and Development in Higher Education, University of California, Berkeley.

RARELY does a behavioral scientist find that his 25-year-old data are useful in the investigation of current problems. It is still rarer for him to find colleagues in related fields who can extend his data, relate them to the interdependent aspects of their own research, and work together to produce, not a series of discrete reports, but a unified study that amounts to appreciably more than the sum of its parts. Newcomb, Koenig, Flacks, and Warwick have done so in a systematic manner in *Persistence and Change: Bennington College and Its Students*

After 25 Years, a publication that represents an ambitious interdisciplinary effort.

Through this book, the authors have made an important, substantive, and methodological contribution to the literature concerning an academic institution's influence on individuals. It also provides insight on the extent to which the goals and image of a college are modified as it moves from its formative years through its institutionalizing process. Because Bennington was born in an era of rapid and controversial social change much like the present, this research has particular value as a model for those interested in studying the impact on individuals of the numerous new experimental colleges that are attempting to break established patterns or entrenched academic traditions.

The initial data for this study were collected by Newcomb during 1938-1940 and reported in his well-known study, *Personality and Social Change*. To Newcomb's findings, which measured the direction and degree to which liberal or conservative attitudes changed among Bennington girls after three years of contact at that institution, Koenig added the dimension "persistence." Questionnaire and interview data collected on Newcomb's sample, nearly 25 years after they graduated or left Bennington,

enabled Koenig to measure to what extent the changes had persisted. The most convincing documentation of this phenomenon rests on a comparison of the responses made by students to Newcomb's questionnaire, which measured political and economic attitudes of the 1938-40 period, with responses of the same students to the same type of questions corrected by Koenig for attitudes prevalent during 1961-1964. Using these data as a measure of the respondent's political-economic progressivism, and additional interview information, Koenig designed a political conservatism index that revealed the respondent's degree of favorability to conservative and non-conservative issues.

Koenig used supporting data to document the fact that the 1938-1940 graduates moved into—and helped to create—a social environment that tended to support and reinforce the value system with which they left college. These data included information about the influence of the respondent's spouse, her choice of friendship types, her participation and involvement in various categories of activities, and her personality characteristics.

WARWICK's research represents an attempt to define and classify Bennington's norms, and to measure variations in the patterns of change that new students experienced as they adapted to its norms. One might question his use of catalog statements or a *New Yorker* cartoon to support his inference that tradition played an important role in the formation of the norms and image of Bennington students. Warwick does offer data that indicate that, by and large, Bennington girls value and give positive sanctions to intellectuality and individuality, unconventionality, and tolerance for others, and that they enrolled at Bennington because they believed the college valued these characteristics. His evidence that Bennington students tend to grow in self-awareness, confidence, and expression, and develop intellectual skills with which they question their values and beliefs, leads inevitably to the question, "Is there an institutional quality that can bring about these changes or does the institution at-

tract a particular type of student who is open to change?" Warwick's conclusion that among the current generation of college students political attitudes do not greatly affect their standing in the college community, suggests that the attitudes measured by Newcomb and Koenig may not be the important ones.

Flacks's data in Chapters 9 and 10 show that, compared to the homogeneous student body described by Newcomb in 1938-1940, Bennington now attracts a pluralistic student culture. Flacks's six-group typology of Bennington's student subcultures based on housing patterns provides new evidence for researchers interested in this aspect of academic planning. His comparison of measured attitudinal differences, between those identified by students as "Creative Individualists" and those described as "the Social Group," indicates that Bennington today has a wider divergence in norm acceptance than existed in its formative years.

Chapter 12 provides interesting data on those described as members of Bennington's deviant subculture—a group identified as collegiates who share norms, interact intensely, insulate themselves from the dominant culture, and receive status from within their group but somewhat less recognition from the larger community. As Flacks points out, the unresolved questions are, to what extent are students predisposed toward entering a given subculture, and to what extent does the college influence his choice? And, to what extent are the findings limited by the fact that the study involves a women's college rather than a coeducational institution?



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Situational Responses

P. S. Kupalov and Coworkers

Situatsionnye Uslovnye Refleksy u Sobak v Norme i Patologii (Situational Conditioned Reflexes in Dogs in Health and in Pathological States). Leningrad: Meditsina, 1964. Pp. 255.

Reviewed by Z. MARTINEK

The senior author, Professor Kupalov, died on 17 March, 1964. He has been well known to American specialists in the field of conditioning. Since the twenties, he maintained close contacts with such men as Howard S. Liddell and W. Horsley Gantt whom he met in Pavlov's laboratory in Leningrad and whom he visited in America in the course of his prolonged journey in 1929. He revisited the United States in connection with the Pavlovian Conference on Higher Nervous Activity held in New York in 1961.

The reviewer, Z. Martinek, has spent several years in Kupalov's laboratory. At present he is associated with the Laboratory of Behavioral Research, a unit in the Institute of Physiology, Czechoslovak Academy of Sciences in Prague.

CONSIDERATION of "situational" conditioned reflexes (CRs), studied extensively by Kupalov since 1942, importantly extended the range of classical Pavlovian conditioning methodology. The dogs were removed from the traditional Pavlovian stand and harness into a spacious room where their reactions could be observed without restraint. These experimental conditions made it possible to study more extensively spontaneous activity and to investigate the spatial factors that play an extraordinarily important role in animal behavior in the natural environment.

The behavior of dogs had been studied in the USSR under similar experimental conditions, in the thirties, by I. S. Beritov. In contrast to Beritov's experimental approach and that of some other workers, the experimenter never takes part personally in the experiments but controls the experimental conditions at a distance, from the neighboring room. Conditioned reactions in unrestrained dogs were called by Kupalov "situational CRs." They involve numerous factors in the experimental situation, that can be designated as "situational CS": character and location of signals, position of the foodtrays, starting platform, etc.

Kupalov's method involves the elaboration of stable patterns of activity (habits), using alimentary reinforcement. The dog is taught to jump up on a table with the foodtray in response to a signal, and shortly thereafter obtains food. During the interval between trials the animal remains at a specified place in the experimental room; this is attained by applying the signal only when the dog is in the specified area. Often spatial discrimination is involved: application of one stimulus signals the presence of food on one table, while another stimulus is reinforced on another table. In order to facilitate description of movements of the experimental animal about the room (7.5 × 5 m), the floor is divided into numbered squares.

In the monograph, the principal methods are described in detail and the results of experiments calling for various types of differentiation are summarized (differentiation of stimuli placed in various parts of the room and reinforced on different tables; differentiation of stimuli applied from the same place, but reinforced on different tables; differentiation of the classical Pavlovian type). Experimental data are also presented concerning the extinction of CRs and delayed CRs. The material is interpreted in terms of Pavlovian concepts, such as central excitation and inhibition, and various types of internal (conditioned) inhibition. The authors believe that the behavior of unrestrained dogs is governed by the same laws as were formulated by Pavlov in his study of salivary CRs.

When the spatial characteristics of the experimental environment are altered, e.g., the conditioned stimulus or the table with the foodtray are transferred into another place of the room, usually only slight and transient changes occur in the behavior. The most marked changes are brought about by changing the location of the starting point, as a rule marked by a small carpet. This seemingly slight change in the experimental environment has led to "dramatic disturbances of higher nervous activity," with accompanying autonomic symptoms (hiccupping, nausea, defecation).

A separate chapter is dedicated to the problem of "voluntary" and "involuntary" movements. The dog may learn to perform some actions that are ordinarily involuntary (shaking, sneezing, scratching), if the chance occurrence is reinforced by food. On the other hand, dogs are capable of acquiring various voluntary movements that lead to obtaining food, for example, pressing a rubber ball or a lever with the paw. Often the animal begins spontaneously to behave towards the source of conditioned stimulation similarly as to food reinforcement, e.g., by licking the electric bulb, the light of which signalizes the appearance of food, or manipulates the small loud-speaker that is the source of the acoustic signal for food. When evaluating these results, the authors find support in the work of Pavlov

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and the well-known findings of J. Konorski and S. Miller (1936), performed in Pavlov's laboratory. However, it is not quite clear why the authors do not compare their results with the extensive material accumulated by Western psychologists concerned with instrumental or operant behavior (reflexes of the II. type according to Konorski). These terms are not even mentioned.

The authors studied the action of a number of drugs upon situational CRs: analgesics of the opium type, cholinolytic drugs, adrenergic substances, and chlorpromazine. In animals recovered from surgical operations of the brain or irradiation by X-rays, chlorpromazine leads to decompensation of higher nervous activity; after its administration, the disturbances originally observed after the operation or irradiation, reappear. In irradiation experiments, the behavior of dogs studied by Kupalov's method was investigated after large (100-300 r) doses, single or repeated, as well as after small doses (1-10 r).

THE AUTHORS describe several cases of experimental neurosis evoked in unrestrained dogs. As a suitable way of eliciting abnormal behavior, very fine discrimination between two acoustic stimuli is recommended. In this connection it should be pointed out that authors often use the term "disturbance" (*narushenie*) in the sense of "change" (*izmenenie*) of behavior. For example, if the animal performs incorrectly when the source of the acoustic stimulus is transferred, this is designated as "a disturbance of higher nervous activity." It would be more correct and precise to speak in this and other similar cases of "changes of behavior" and to limit the terms "disturbance" or "disorder" to clearly abnormal behavior.

In the original form of Kupalov's method the experimenter himself triggers the conditioned stimuli and times the dog's behavior by a stop-watch. When experiments are performed in this way, accuracy is less than optimal and some valuable information is lost. It has been shown that experiments with situational CRs on dogs can be automatic and objective registration

may be used as in behavioral experiments on rats. See V. Přibík and Z. Martinek, "Device for automatic control and programming of experiments with situational conditioned reflexes on dogs" (in English), *Physiol. Bohemoslov.* 14: 390, 1965.

In several instances, the authors still reflect the "Pavlovian" dogmatism of the 1950's. For example, they repeat the statement that "behaviorism attempts to fit the highly variable higher nervous activity of animals and man into a primitive schema of 'stimulus-response.'" This general formulation is not supported by concrete confrontation with facts. Furthermore, the criticism would apply only to the initial phase of the behaviorist school. Today such argumentation appears anachronistic. It is not without interest that the extreme adherence of Pavlov's school to the "S-R" conception was criticized by several Soviet scientists at the conference on philosophical problems of the physiology of higher nervous activity and psychology, held in Moscow in 1962.

Readers of the monograph will repeatedly find that the authors do not compare their experimental results with those of Western experimental and physiological psychology. This is also born out by the fact that in the list of references, there is a preponderance of Russian citations (418 references as compared with 33 non-Russian references). But it would only be fair to note that the majority of Western authors are equally (and, at times, more) onesided in the literature they cite.

There is no doubt that this monograph represents an outstanding piece of work. It shows how the original, relatively narrow procedural (and hence, necessarily, also the conceptual) boundaries of the Pavlovian School expanded to encompass the study of the behavior of free-moving animals, under more natural conditions. This approach opens up possibilities of closer contacts with representatives of various Western trends of research in this field.



Disappointing Humanism

Rollin Chambliss

Meaning for Man. New York: Philosophical Library, 1966. Pp. xi + 191. \$4.50.

Reviewed by ROBERT N. SCHNEIDER

The author, Rollin Chambliss, is Chairman of the Department of Sociology, University of Hartford.

Robert N. Schneider, the reviewer, has been Coordinator of Psychological Services, Unit A, V.A. Hospital, Jefferson Barracks, Missouri. He received his PhD from the University of Missouri in 1962; his degree was in counseling psychology but he has worked as a clinical psychologist. He is especially interested in the "Group-Process-History," especially the family and family therapy. He also has a continuing interest in existential psychology. He is currently in private practice in St. Louis.

ROLLIN CHAMBLISS is a sociologist who has written a book about a philosophical problem. Although his problem will appeal to many behavioral scientists, it appears doubtful to this reviewer that his book will receive wide acceptance among them. This opinion is held in part because of Chambliss's writing style, which is more characteristic of the literature of philosophy. The reviewer's opinion in this direction is heavily influenced, however, by his judgment that the book misses its mark. In his preface, Chambliss sets himself the task of presenting an image of Western man. A glance at the table of contents leads one to predict accurately that the book is a compilation of essays on such topics as heredity, environment, personality, love, freedom, meaning, etc. On the basis of the title, the preface, and the listed contents, this reviewer, who counts himself among those psychologists with a strongly humanistic orientation, began the book with great expectations. As it turned out, they were too great.

Chambliss has written his book in the scholarly tradition, drawing from a wide

range of literature, and tracing the history of thought about his chosen topics. The narrative is interesting, quite readable, and at times thought-provoking. However, the total impact of the book, when judged in terms of the expectations created in this reviewer by the title and the author's purpose, was disappointing.

THE TITLE suggests that Chambliss has something to add to the growing literature on meaning in man's existence. In view of the title, it was initially surprising to discover that the book is not organized around the theme of meaning for man. Rather an essay on meaning is just one of the series, making its appearance as Chapter VII. In that chapter, one finds some by-now-familiar arguments to the effect that modern science has not only failed to provide meaning for man's existence, but it has "... led man back to the abyss of doubt from which it had earlier promised to deliver him" (p. 124). The author goes on to describe George Herbert Mead's resolution of the existential dilemma about meaning. It can only be assumed that Mead's contributions represent Chambliss's point of view. In any event, a hoped-for fresh point of view is not forthcoming.

The second expectation, namely that the book might provide a fresh look at the image of Western man, is also left unfulfilled. Rather than an image of man, the book presents a rehash of the existential issues confronting man, especially in his quest for understanding himself and the human condition. Thus, the reader gets not a unified portrait of the image of Western man as seen by the author, but a richly detailed picture of the difficulties encountered in attempting to draw such an image. This is hardly a devastating criticism, since presenting a unique and perhaps more coherent image of man is a large order. It is probable that a different title and a less ambitious purpose would not have led to these expectations.

To summarize, although the book provides a well written account of some major issues facing man and in that way provides a perspective of which any well-educated student of human behav-

ior should be aware, its total impact is less than powerful. Personally, this reviewer would recommend other literature such as May's *Existence, Existential*

Psychology, and Severin's *Humanistic Viewpoints in Psychology*, to psychology students who want or need this kind of exposure.

Applied Psychology in East-Germany

Klix, F., Siebenbrodt, J., and Timpe, K. H. (Eds.)

Ingenieurspsychologie und Volkswirtschaft (The Psychology of Engineering and Economy). Berlin: VEB Deutscher Verlag der Wissenschaften, 1966. Pp. 220, MDN 9.80.

Friedrich, W.

Jugend Heute (Youth Today). Berlin: VEB Deutscher Verlag der Wissenschaften, 1966. Pp. 200, MDN 7.20.

Schmidt, H. D., and Kasielke, Edith (Eds.)

Psychologie und Rechtspraxis (Psychology and Law Practice). Berlin: VEB Deutscher Verlag der Wissenschaften, 1966. Pp. 156, MDN 7.—.

Reviewed by JÖRG SOMMER

The editors of the first book are all members of the Psychologisches Institut of the Humboldt Universität in East-Berlin. Professor Friedhardt Klix, the director, is the author of numerous books and articles. His book *Elementaranalysen zur Psychophysik der Raumwahrnehmung* is presently being translated into English by James J. Gibson. Jouchim Siebenbrodt and Klaus Timpe are assistants at the Institut working in the area of industrial psychology. The author of the second book, Professor Walter Friedrich, took his doctorate at Leipzig. His interests are in adolescent and pedagogical psychology. The editors of the third book, Hans-Dieter Schmidt and Edith Kasielke, received their doctorates from the Humboldt Universität

where Schmidt functions as Dozent and Kasielke as research assistant.

The reviewer, Jörg Sommer, studied psychology at Frankfurt and Marburg. He taught and did perceptual research at Göttingen Universität where he received a DSc degree. He has worked on accident prevention in industrial settings and is presently conducting illumination research for the "Studiengemeinschaft Licht, e.V." in Wiesbaden.

THE East-German applied psychology that these three books presents is generally not well known in the West. Western disinterest in Eastern applied psychology may stem largely from an unwillingness to read through the Marxist doctrine that permeates the applied

field more than any other psychological area.

The first book, on the *Psychology of Engineering and Economy*, contains 18 separate experimental contributions, all geared to present psychological methods that increase industrial production. Information theory, signal detection, learning, and thought processes receive special emphasis, while questions of employee selections are rarely discussed. The practical results and the solutions presented in this book would perhaps be just as clear, if not clearer, without the discussion on algorithms, graph theory, and coding systems. Though these modern methods are an important part of human engineering, one has the impression that they are used as fancy labels because they are not integrated into the respective experiments. It is, for instance, difficult to see how Wendrich concludes from his graph theory that it is possible to teach foremen advantageous and time-saving work methods. A similar lack of co-ordination between theoretical models and practical results is found in the algorithms discussed by Krivohlavy and the correlational analyses used by Neubert & Shell. Statistical evaluations are lacking in some studies and are insufficient in certain other ones. Seeber, for instance, employs 72 T-tests in a multifactorial design where an analysis of variance would have been the appropriate method, and Dietze & Schiller examine a quantitative variable (loss of information in bit) by Chi square. Less than one third of the references are from American sources. This proportion appears somewhat inadequate considering the great amount of work done in the U. S. in these areas.

THE book *Youth To-day* by Friedrich is partially a sociological study of youth. More than half of it is devoted to history and to general psychology not related to adolescence. The first part of the book presents the development of viewpoints and theories about the determination of human behavior. The "decisive insight" of Marx and Engels is considered as given and undebatable. The second part of the book presents

the author's own viewpoints about determinism.

Only in the third part is the reader introduced to Marxist adolescent psychology. Here the results of a multiple choice questionnaire given to over 2000 adolescents are presented. The questions were aimed at testing the adolescent's ideological position, his philosophy of life, his social attitude, and his self-evaluation of his efforts and character. The results of the question: "Are you convinced that the socialistic form of society will reach world-wide recognition"? is discussed in various ways, but never so that one can gain a clear picture of the "yes" and "no" answers. Rather frustrating to the Western reader! The more so, since the results to all other questions are presented in percentages in contingency tables. The quality of the various statistics used is uneven. Sometimes there is no statistic, sometimes a contingency coefficient, sometimes a Chi-square, and there is also the use of T-tests to evaluate a qualitative variable. The author presents his pedagogical advice in the last section of the book that serves to reinforce the adolescent's socialistic beliefs.

THE THIRD BOOK, *Psychology and Law-practice*, is written for the psychological layman. Eight separate contributions deal with the psychological causes of delinquency, with methods for analyzing individual cases, with psychological bases for the legal evaluation of the lawbreaker, and with the validity of the juvenile witness. Problems of punishment and of rehabilitation are not considered. Certain methodological considerations appear to be treated inadequately. Gutjahr, for instance, mentions no standardized test procedures in his article on the reliability of the juvenile witness report. Helm is reticent about validity studies that aim to predict delinquency like those of Glueck & Glueck. Strauss, on the other hand, devotes much space to Kretschmer's typology of 1921. In spite of these technical shortcomings the book is very instructive to the legal practitioner and fulfills its purpose well.

There seems to be several common

denominators of the three books examined. The mathematical theories are up-to-date, but are rarely integrated with the experiments, results, or discussions. The statistical tests vary considerably in sophistication. Their occasional absence can perhaps be excused in books written for the psychological layman, but not their misuse. This heterogeneity can not be attributed to a non-scientific attitude in East-Germany, because as already pointed out, certain contributions, especially those in "psychology of engineering and economy" meet the best international standards. One is convinced that this psychological method will play an important part in the future technical developments in East Germany. On the positive side, all three books present useful and challenging information to their readers.

There is no Marxist chemistry and no Marxist physics, and when reading East-German psychology books the Western reader may wonder why there is a Marxist psychology. He may, however, ask himself if there is any country in which psychology is sufficiently advanced so that it can handle its applied problems, its youth, and its economy outside of any religious, social, or political framework. If such a country can not be found, we may ask again whether it is more scientific to ignore this framework or to state it emphatically.



Those medical books, those monuments of nature's frailty and art's might! When they tell us about the least significant malady they make us tremble for fear of death, but once they speak about the virtue of their remedies, they bask us in heavenly security, as if already we had become immortal.

—MONTESQUIEU



Titles in Psychology from The Macmillan Company

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By David C. Edwards,
Iowa State University

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1968, 394 pages, \$5.95

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By Anne Anastasi,
Fordham University

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1968, 672 pages, \$9.25

Principles of Behavioral Analysis

By J. R. Millenson,
York University, Toronto

This rigorous and systematic text is designed for use in first courses in psychology in which major concepts of functional behavioral analysis are built from the ground up. A unique feature of the book is its use of the *R* and *S* notation system as a kind of conceptualization and recording method. Elementary statistical concepts are developed within the framework of the data presented. Over 400 tables, line drawings, and diagrams are contained.

1967, 488 pages, \$7.95

Personality: A Behavioral Analysis

By Robert W. Lundin,
The University of the South

This book is a revision of the author's *Personality: An Experimental Approach*. It contains a significant amount of new material not available when the original volume was published in 1961. The title change reflects the addition of much contemporary research in the application of operant conditioning techniques to human behavior. Such topics as stuttering, human concept formation, autistic children, implicit response, and punishment are discussed. In addition, an entirely new chapter on behavior therapy has been included.

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Essential or Helpful

Robert M. W. Travers

Essentials of Learning: An Overview for Students of Education. 2nd ed.
New York: Macmillan, 1967. Pp. xi + 560.

Reviewed by HERBERT J. KLAUSMEIER

Robert M. W. Travers is Distinguished University Professor at Western Michigan University, Kalamazoo, Michigan. From 1958-1965, he was Professor and Chairman, Department of Educational Psychology, University of Utah. He is the author of *An Introduction to Educational Research and of articles on learning and research methods. He has recently been studying the information transmission characteristics of various media and the design of audiovisual teaching materials.*

The reviewer, Herbert J. Klausmeier, is V. A. C. Henmon Professor of Educational Psychology and Director of the Wisconsin Research and Development Center for Cognitive Learning, Madison, Wisconsin. He is the senior author of *Learning and Human Abilities: Educational Psychology. The structure of concepts and the learning and teaching of concepts are his main research concerns.*

A FAIR EVALUATION of this second edition of *Essentials of Learning* is provided in the preface: "a course in a college of education based on this text would never be criticized either as being too easy or as lacking in content." Any student just beginning study in the area of learning who devotes the necessary time for the careful reading this volume requires will be amply rewarded with a firm foundation in the vocabulary, methodology, empirical knowledge, and theoretical issues of traditional learning theory, or the science of learning. This is the primary value of the

book to graduate and undergraduate students of education, the groups for whom the book was written.

A recurrent theme of the book is that learning research, though still tenuous in its application to education, has provided and hopefully will increasingly provide the knowledge about efficient conditions of learning that is the prerequisite for rational changes in the teaching methods, materials, and curriculum of the school. The relationship between basic research in learning and educational practice needs to be pointed out both to beginning students and indeed even experienced educators who often disregard research in learning under controlled laboratory conditions because it appears too remote from the classroom. The point is made that the educational reform is more likely to result from the "indirect" approach through controlled laboratory research than through the direct approach of contrasting teaching methods and materials in the classroom setting.

The text is well organized and gives a clear account of many learning phenomena, as traditionally studied in the laboratory. The introductory chapters present an orientation to the field of learning, not instruction, through a discussion of classification of learning phenomena, stimulus variables, response measures, and the nature of scientific explanation and theory. Subsequent chapters treat reinforcement, generalization and discrimination, verbal learning, motivation, the nervous system, and

transfer in more detail. In each of these chapters the more classical research is presented along with brief presentations of major theoretical positions. In some instances space does not permit sufficient treatment of even the main tenets of these theories. For example, the treatment of some aspects of the Hull-Spence theory is superficial to the point of being misleading. On the credit side, however, the assumptions of the major theories that appear to be well grounded in research and those that do not are pointed out.

In later chapters developmental processes, retention, and problem solving are treated. Again the material is generally thorough and clearly and interestingly presented. It is not surprising, however, in a book of this scope to find that some topics are less well covered than others. For instance, recent research in the area of transfer has progressed in terms of analytical power much beyond Osgood's model. Some readers may be mildly concerned that the work of major investigators in certain areas are not even briefly mentioned (e.g., Underwood on distributed practice, Peterson and Peterson on short-term memory, and Carroll on language learning).

The final chapters of the book deal with such topics as social factors influencing learning, the learning of attitudes, perceptual and phenomenological approaches to learning, the measurement of aptitudes, and mechanization in the classroom that is a discussion of the history and current development of the teaching machine. The chapter summaries and epilogue present lists of generalizations that purportedly are useful in the management of learning in school settings.

THIS book reflects a number of viewpoints about learning theory and educational practice that merit thought and discussion. First, a science of human learning is developed through carefully controlled laboratory experiments; experiments in school settings contribute little to theory development or refinement. Second, principles of learning established in laboratory experiments provide an excellent foundation for cur-

riculum planning and for sound instructional methods. Third, experts in learning conversant with education can point out general implications of learning theory to education; in turn, teachers of varying characteristics can apply the principles to children of widely varying characteristics in varying school environments.

Concerning the first of these viewpoints, there is general agreement among educational psychologists today that learning theories are best developed in, or at least under, laboratory conditions and also that empirical studies, unrelated to any clearly formulated model or integrated set of principles, contribute little toward theory development or educational improvement. However, many psychologists and educators espouse the viewpoints that are somewhat different from those in the present volume. For example, traditional learning theories of the past have demonstrated little relevance to the explanation and prediction of learning in school settings; subtheories related to less-inclusive categories such as verbal learning, skill learning, concept learning, and personality development are rapidly replacing global learning theories and broad general principles. It might also be argued that principles formulated in the learning laboratory must first be translated into usable materials or procedures and then tested in classroom settings under the best possible experimental conditions before being recommended to teachers as foundations of educational method.

The flavor of the book and its recurrent theme are evident in the sources of information. Thus, in the Index of Names, the nine authors with the most page citations (eight or more) are A. Binet, H. Ebbinghaus, H. F. Harlow, D. O. Hebb, C. L. Hull, B. F. Skinner, K. W. Spence, E. L. Thorndike, and R. M. A. Travers. Also, approximately 25 per cent of all references listed in the volume were published before 1950, about 57 percent between 1950 and 1959, and 18 per cent thereafter. Many significant contributions of the current decade are mentioned only briefly or not at all.

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Psychophysiology and Personality Research

Gordon S. Claridge

Personality and Arousal: A Psychophysiological Study of Psychiatric Disorder. London: Pergamon, 1967. Pp. xviii + 274. \$11.50.

Reviewed by RICHARD F. DOCTER

The author, Gordon S. Claridge, is Lecturer in Psychology, Department of Psychological Medicine, University of Glasgow. He served for four years as research assistant with H. J. Eysenck at the Institute of Psychiatry, London.

The reviewer, Richard F. Docter, is currently Chairman of the Department of Psychology, San Fernando Valley State College. He received his PhD from Stanford University in 1955 and for three years held a research fellowship at UCLA's Brain Research Institute working principally on the visual system. He later developed a psychophysiological research program within the Neuropsychiatric Institute at UCLA. Except for a one-year stint at APA's Central Office, most of his career has been devoted to animal and human experimentation involving autonomic, muscular, and electroencephalographic correlates of behavior.

THIS BOOK is an effort to integrate what has come to be known as arousal theory with personality constructs as viewed mainly from the orientation of Eysenck. This is a happy match, for while Eysenck has been an important source of stimulation and innovation as a personality theorist, the study of general and specific arousal mechanisms has been the focal point of brain research during the past two decades.

The constructs of arousal, general drive level, excitability, activation, and so forth have been around in one form or another for a long time, but they have not been well integrated into any major theory of psychopathology; indeed, there appears little likelihood that this is about to occur. One problem of major importance is that there is little agreement as to the meaning of these constructs, their factorial attributes, or how to measure them. Almost everyone agrees that something akin to arousal might be a very important causal dimension of behavior, but for the most part this remains a substrate to which the personality theorist alludes when all else fails. But this book is in the mainstream of some very important ideas, and the author is at his best when he conceptualizes, reasons out alternative interpretations, and integrates with considerable scholarship his results with the research and theories of others.

Most of this book is a review of the author's experimentation conducted over several years, drawing primarily from neurotic and psychotic populations in a military hospital. His basic question comes down to this: What individual differences in the level, modulation, or control of arousal may be fundamental determinants of behavior? While the central focus is on neurotic and psychotic behavior, the total concern is

directed toward personality in general rather than simply psychopathology.

His experimental approach begins with the identification of groups of patients who manifest different behavior. He places great weight, perhaps a bit too much, on what is seen as a clear behavioral continuum ranging from dysthymia (obsessives, anxiety states, reactive depressions) through hysterico-psychopathy (conversion hysteria, hysterical personality, psychopathic behavior disorders). The acceptance of psychiatric diagnoses for the definition of neurotic criterion groups is a bit hard to swallow. Further, there may be an over-reliance on Eysenck's work that suggested major differences between neurotics along the dysthymia-hysteria continuum. Claridge has asked if psychophysiological processes underlying these behavioral differences can be discovered, and he has selected arousability as the measure of primary concern.

ARE DIFFERENCES in arousability related to variations in personality type? Yes, and you'll have to read the book for details. But it is important to note that most of the support for this conclusion rests on the particular measure of arousability employed. Claridge developed a variant on the sedation threshold procedure involving continuous administration of amylobarbitone sodium; the subject was required to respond to a series of numbers by giving double the digit presented. Sedation threshold was defined in terms of a criterion of performance decrement. It would help greatly to have more information on this measure, especially relative to its intra-individual stability over time and its relationship to other indices of arousability.

Through careful analysis of the relationships among EEG, autonomic and sedation threshold data, the author concluded that neurotics with dysthymic symptoms (anxious and agitated) have high arousability and strong sympathetic reactivity, while the less agitated neurotics (hysterico-psychopaths) show weaker arousability. There remains some confusion as to whether it is the capacity to be aroused that is most important

A PHILOSOPHY OF SCIENCE FOR PERSONALITY THEORY

JOSEPH F. RYCHLAK

This book provides a framework within which the long-standing problems of psychology can be better understood. Part 1 reviews the background issues which have led to controversy and discusses the nature of theory and method in science. In Part 2 the basic conflict between the "computerized" or mechanistic conception of man and the "humanistic" or dynamic one is shown to have grown out of the historical bifurcation between dialectical and demonstrative reasoning. The author argues that psychologists must learn to consider both points of view in their reasoning about man.

508 pages

1968

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Edited by LESLIE Y. RABKIN
and JOHN E. CARR

A collection of readings designed to give the student an understanding of psychopathology, this book focuses on the dynamic elements and family aspects of disturbed behavior. Drawn from both recent research and classic papers in the field, the selections examine such basic questions as, "What is the nature of the interpersonal field of the disturbed person, what is the inner experience of the disordered individual, and out of what kind of family matrix does disturbance arise?" The selections are organized around psychiatric syndromes; prefacing each section is a brief introduction to the subject covered and a resume of the articles which follow.

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Edited by JAMES M. VANDERPLAS

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here, or whether arousability is taken more as an indicator of general drive level. His discussion of the interrelationships among a variety of psychophysiological indices is thorough and convincing.

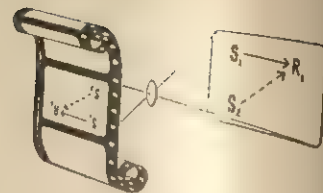
Claridge then takes up experimental results on the performance correlates of arousal. He reviews this literature and reports extensive original work involving a variety of perceptual, sensory, and cognitive measures. Special attention is given to the spiral after-effect and its curvilinear relationship to sedation threshold data; this becomes especially important in his later development of a theory integrating physiological performance and behavioral data that is the high point of the book.

The same battery of physiological and performance tests are administered to psychotic patients and an effort is made to integrate the findings into a theoretical framework with arousal level and the control of arousal as unifying concepts. Most of what is said about psychotic behavior ought to be clearly labeled as pilot work followed by very tentative but sometimes provocative conclusions. Probably some students of psychopathology will be a bit put off by Claridge's willingness to build theory from a rather narrow data base; others will be pleased with his effort to hurdle many of the historic stereotypes of psychotic behavior.

This book does not attempt to be a comprehensive review of either arousal or personality theory, for there is no hope at present that all of the complexities of these troublesome topics might be unraveled; rather, this is a scholarly review of important original research coupled with the development of explanatory models cutting across major areas of psychological concern. This work stands as one of the few examples of a program of research linking arousal theory and personality. This is not a text for beginners in any discipline, but it is sure to be a valuable supplement to advanced courses in personality and psychophysiology.



INSTRUCTIONAL MEDIA



Interpretation of Development by Piagetophytes

The Intellectual Development of Babies. Produced and Directed by Greta Morine and Ruth Formanek. Nine 8 mm. cartridges with accompanying manual. Not available for rental. Sale of 9 cartridges plus 30 manuals \$150.00. Distributed by Formanek-Morine Productions, 2550 Independence Avenue, Riverdale, N. Y. 10463.

Reviewed by PAUL WEISBERG

Greta Morine, one of the producers of the film reviewed here, received her EdD from Teachers College, Columbia. She has taught in grade schools and since 1964 has been Assistant Professor of Education at Hofstra College. She is author with Neil Postman and Harold Morine of *Discovering Your Language*. The second producer, Ruth Formanek, received her PhD from the University of Vienna in 1963. She has been a kindergarten teacher, Clinical Psychologist, Central Islip State Hospital, New York, and a School Psychologist in Brentwood, New York. Since 1964 she has been Associate Professor at Hofstra College. The two have produced two other films: *Stages of Classification and Conservation Tasks*.

Paul Weisberg, the reviewer, a 1962 PhD from the University of Maryland, was Assistant Professor of Psychology at Brown University until 1968 and is now Associate Professor at the University of Alabama. His research interests concern the role of reinforcement schedules in the control of behavior of preverbal children. With Lipsitt and Kaye he has produced a film: *Learning in Infants*.

ANYONE, after using an 8 mm. cartridge projector for the first time is likely to have great admiration for this nifty device in that it *does* show motion pictures (albeit soundless) and yet requires hardly any effort or skill to operate. The continuous loop feature of the enclosed film cartridge enables fast and automatic recovery of missed scenes without any rewinding or threading problems and this feature even entices the astute viewer to take second looks.

Theoretically, the maximal running time for a single cartridge is four minutes—long enough to document a few behavioral phenomena that make some contact with a theory as inclusive as Piaget's but too capsulized to penetrate deeply and tie together some of the major tenets of this theory. Morine and Formanek probably realized this problem and wisely attempted to overcome it by providing a total of nine cartridges plus a manual in order to illustrate some of Piaget's notions on how infants interact with and order their environment during the first year of life.

The style of the film is reminiscent of the old Gesell series wherein a hidden adult presents or induces infants of

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various ages to respond to a wide array of objects and, at each stage of development, there is a description of and explanation for the diverse topographies exhibited. In the Morine and Formanek version, the photography is in color, the stimulus materials are common household items or toys, the eight babies range in age from 5 weeks to 13 months, and interpretations of their actions are solely Piagetian.

Although the sales brochure mentions that the use of the manual is optional, without it the unsophisticated student (and even perhaps the Piagetian devotee) would be at a loss to understand most of the film's material. The first two thirds of the 18-page manual is a cartridge-by-cartridge synopsis of what the baby is doing during each scene and what concept is being illustrated, while the remaining third includes descriptions of development differences along conceptual lines and a list of suggested references that pertain to the Piagetian school of thought.

As it now stands, those familiar with the work of Piaget will derive the greatest benefit from this cartridge-manual kit. From the very start, the audience is provided with instances of different schemas in action—vision, sucking, grasping, banging—together with the various levels or degrees of repertoires, dominances, coordinations, and differentiations these schemas may take. From the sixth to the last cartridge, manifestations of other concepts, entailing reversibility, object permanence, and assimilation are encountered and given prominence. While this assortment of terms may make the student who is familiar with J. McV. Hunt's *Intelligence and Experience* or other introductions to Piaget feel at home, one wonders whether the structure of the manual in its present form will satisfy the more naive members in the audience.

tion stating the aims of the manual and film and what the audience can expect to learn or observe. (2) Whenever a cartridge deals with new or relatively unfamiliar terms, an adequate description of them should appear in the basic information section of the manual along with the currently provided material, viz., the infant's age, physical capabilities, and stage of development. (3) Attention to the developmental similarities and differences of the film subjects with respect to particular concepts should be mentioned at the time the baby's actions are being described. These comparisons, which are now summarized in the last few pages of the manual, could remain there for review purposes, but for the sake of the viewer with a less than perfect memory and who is unwilling to see repeat performances, remarks relating to important comparisons should occur while the sequence is shown.

These suggestions, if implemented (and this can be done with minimal expense since the manual pages are mimeographed and stapled together) will make certain parts of its content more meaningful. Unfortunately, there are shortcomings inherent in the film for which compensation by revision of the manual will prove difficult. For example, new sequences are always introduced by numeral-alphabetical titles (1a, 1b, etc.) whereas the use of descriptive headings for each sequence would be a more educational and functional procedure (i.e., sucking schema, 1a). When the numerical-alphabetical approach to titling precedes a series of short, disconnected sequences in which the action is diffuse and unsteady, the over-all effect is confusing and irksome.

A case in point is in cartridge 2 where, to convey the impression that the schemas of a 5-month infant vary in their level of coordination, critical objects (plastic flower, shoehorn, clothespin) are presented, but the reactions made to each object occur too fast for the viewer to keep tabs on what was said in the manual while the sequence it has described is being shown. Unfortunately, the objects were not readministered and so one can either faithfully accept the conclusions offered in the manual or turn away in puzzlement. On the other hand, the action developed

in part of cartridge 5 creates a sense of continuity that simplifies and therefore increases the viewers' understanding: to illustrate the range of schemas that a 7-month old child has, only one of a number of play objects (plastic flower, shoe, ribbon, tape reel, ruler, spoon) are presented in each sequence and, in the presence of each, dominant and subsidiary forms of responding become clearly evident. Although each scene is relatively short (10 to 28 sec), this is not disturbing since information is easily gathered that also helps in learning what to expect in upcoming sequences.

THE CONCEPT most adequately developed was object permanence. Perhaps because this concept is easily demonstrated, almost no dependence upon the manual was needed to appreciate what was happening—in its simplest form, an object is hidden under a cover or blanket and the child either retrieves it or not, much like a single choice, delayed reaction procedure with about a half-second delay interval. Action pertaining to object permanence commences in the last sequence of cartridge 5 when a hidden object provokes no searching by a 7-month infant while in the next cartridge a 9-month infant actively seeks and recovers the lure, giving support to the belief that objects remain even though our immediate perception of them is lost. Then problem difficulty increases. The 9-month infant loses interest when a lure is displaced successively under two objects but very soon 11- and 12-month infants are shown to solve problems involving a series of two and three displacements, respectively (opening sequences in cartridges 7 and 8). Lastly, cartridge 9 ends with a 13-month infant but this time it is the baby who is doing the hiding as part of the familiar "peek-a-boo" game, during which every so often he ducks behind a pillow, sealing off part of the environment, and then happily exposes himself, restoring permanence to the environment. In contrast to the good programming principles utilized in this run, the sequences dealing with assimilation, equilibrium and action as motivation are poor.

TO APPEAL to a larger audience, and enhance the effectiveness of the film as a teaching instrument instead of one which merely gives empirical credence to some theory, the following modifications of the manual are proposed: (1) There is need for a concise introduc-

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veloped, partly because insufficient background material is provided in the manual, but mainly because the one or two sequences devoted to these concepts contained too much action presented in too rapid a fashion and in a rather disjointed manner. In addition, it is difficult to distinguish and follow separate concepts when the relevant sequences are spread piecemeal over nine cartridges.

An alternative format in which a common concept is treated within a single cartridge seems a better arrangement. Reference to developmental differences is then inescapable since the actors in each cartridge are different aged infants exhibiting various levels of functioning around a core concept. Of course, this approach places greater responsibility on pre-film planning and post-film editing, but the outcome would most certainly be one of better organization and greater educational significance.

Finally, the inquisitive student with behavioral leanings may take issue with several of Morine's and Formanek's conclusions: he may agree that the mouth openings, hand tremor and reaching elicited in a 5-month old infant when presented with a milk bottle is a sign of object classification according to affect but he may also recognize the excitement as anticipatory behavior formed via classical conditioning. He may not accept on faith "that sucking schema (is) not used. (by a 5-month infant) even with objects (medicine bottle, cup) suggestive of this activity" (manual, p. 5) unless he is also shown a variety of objects that definitely evoke this scheme. He may not be willing to accept certain teleologically slanted explanations such as the "child (13-months) is not climbing out of (the) playpen in order to get out, but simply to climb" (p. 12) unless the significant adults including the cameraman, who are presumably watching and reacting to his climbing are systematically removed from and returned to the situation. Yet, the very fact that *The Intellectual Development of Babies* promotes differences of interpretations, whether intentional or not, is one of its strongest recommendations. These 8 mm. cartridges, which are rich in con-

tent diversity, can provide a source of vigorous classroom discussion and, at the same time, increase the audience's awareness of the infant's behavioral repertoire—an awareness always welcomed in child psychology classes.

A Cookbook of Community Mental Health

H. G. Whittington

Psychiatry in the American Community. New York: International Universities Press, 1966. Pp. ix + 476. \$10.00.

Reviewed by ARTHUR J. BINDMAN

The author, H. G. Whittington, is Director of Psychiatry, Denver Department of Health and Hospitals, and is in the process of developing a comprehensive community mental health program for the city of Denver. He was previously Director of the Community Mental Health Services for the State of Kansas and Director of the Mental Health Clinic of the Student Health Services at the University of Kansas. He is the author of Psychiatry on the College Campus.

Arthur J. Bindman, the reviewer, is Assistant to the Commissioner of Mental Health, Massachusetts Department of Mental Health. He has been involved in the development of the community mental health program in Massachusetts. Until recently he has been Chief Mental Health Coordinator and Director of Psychological Services. His PhD in clinical psychology is from Boston University and he also has a Masters in Public Health from the Harvard School of Public Health. He has written

on various aspects of community mental health and mental health consultation methods.

DOES the development of community mental health services need a "cookbook"? Whittington thinks it does, and he has developed a number of tables and charts that outline problems and issues in community mental health services. Perhaps these are the most useful portions of his book since they provide a summarized conceptualization of the major facets of such programming. They are particularly useful to those mental health workers and citizens who are starting to "cook up" their own programs.

The book provides an unevenly written overview of a wide variety of topics. Some areas, such as consultation, are reviewed in depth, while other chapters, such as addictive diseases and mental retardation are treated superficially that one questions the need for their inclusion. Two of the chapters on persuasive communication and mental health education are written by Susan Ellermeier of the Informational Council for Kansas Community Mental Health Services, and provide a different, even more pragmatically oriented style to the over-all text.

Frequently using the State of Kansas as his key example, Whittington attempts to trace the community mental health movement and the development of services from an historical perspective. The reader is led through chapters on organization of community mental health services, community organization, aspects of prevention, consultation and clinical treatment programs, as well as issues in administration, planning, supervision, research, and training.

New community mental health workers may profit from the experiences and problems that are described, but one often has the disquieting feeling that the author has developed all the "rules" for organizing and operating these services from a rather rigid medical model. His position regarding the need for medical and/or psychiatric leadership is repeated ad nauseum under the guise of "medical responsibility." In one chapter entitled, "The Team," Whittington presents a rather biased review of the role



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definition of mental health practitioners, with particular emphasis upon the ancillary professions of psychology and social work. Social workers are seen as accepting their ancillary role ascriptions under the supervision and direction of licensed physicians, while psychologists are viewed as more difficult to control. Once again, the psychiatrist-psychologist "cold war" and the scrambling for leadership positions has become a central issue, while the manifold problems of demands for manpower, societal needs, lack of sufficient administrators, and the "best man" principle go begging. Whittington would have community psychiatrists providing all the supervision and directing the action or in effect "drop out." This concept is already dated as the demands of society have forced states to utilize a wide variety of non-medical administrators as well as an increasing number of non-professionals. It is of interest that one finds no discussion of the use of non-professionals and other indigenous mental health workers, although they have become increasingly important in developing a truly community-oriented mental health endeavor.

Whittington has provided a somewhat practical guide to the development of community mental health programs. The book's weakness is its selected frame of reference and frequent superficial treatment of important issues. Its strength is its tables and case examples that may give a beginner a rapid orientation and taste for more. A guide to truly comprehensive community mental health services has not been written as yet.

Holmes was skeptical of everything except life itself.

—FRANCIS BIDDLE

The Bottle? The Man?

Eva Maria Blum and Richard H. Blum. Foreword by Morris E. Chafetz
Alcoholism: Modern Psychological Approaches to Treatment. San Francisco: Jossey-Bass, 1967. Pp. xvi + 373. \$10.00.

Jack H. Mendelson (Ed.)

Alcoholism. Boston: Little, Brown, 1966. Pp. viii + 260.

David J. Pittman (Ed.)

Alcoholism. New York: Harper & Row, 1967. Pp. x + 276. \$3.75.

Jorge Vallés

How to Live with an Alcoholic. New York: Essandess Special Editions. A Division of Simon & Shuster, 1967. Pp. 90. \$1.00.

Reviewed by MELVIN B. DRUCKER

The first authors, the Blums, are man and wife. Eva Maria Blum is Research Associate, Institute for the Study of Human Problems, Stanford University, and Associate Editor of the Encyclopedia of Problems of Alcohol. Richard H. Blum is Consultant and Project Coordinator, Institute for the Study of Human Problems, Lecturer, Center for Training in Community Psychiatry, and a consultant to the San Mateo County Sheriff's Department. The editor of the second book, Jack H. Mendelson is Director, National Center for Prevention and Control of Alcoholism, NIMH. Editor of the third book, David J. Pittman, is Professor of Sociology and Director of the Social Science Institute, Washington University. Jorge Vallés is Director of the Alcoholism Unit, VA Hospital, Houston, Texas.

The reviewer, Melvin B. Drucker, received his PhD from George Peabody College for Teachers and did his internship with the South Carolina Mental

Health Commission. He is a Diplomat in clinical psychology, and at present, is Clinical Psychologist with the Chaplaincy Training Project, Georgian Clinic, Alcoholic Rehabilitation Service, Georgia Department of Public Health, and a lecturer in psychology, Georgia State College.

THERE is a growing awareness in our society of the need to "do something" about alcoholism and individuals labeled "alcoholic." The most frequent "something" that has been done is to accept the stand of the National Council on Alcoholism that "alcoholism is an illness" and "is treatable." As a result, medically-oriented programs to help the alcoholic are established to seek a "cure" for the "disease" of alcoholism. However, the unworkableness of this approach may be seen in the mutual dislike alcoholics and mental health workers have for each other. New conceptualizations of this problem

area, new methods of working with alcoholics, and new research are needed. The four books reviewed here, together and individually, attempt to offer some fresh ideas to help our understanding of alcoholism and its treatment.

The volumes edited by Mendelson and by Pittman are a series of papers by a number of different authors, written either for the present books or written for other sources and reprinted here. The volume by the Blums is directed toward a review of "psychological approaches to treatment" of the alcoholic. The volume by Vallés is directed toward wives, in particular, of alcoholics and is an attempt to help them understand the nature of their husbands' alcoholism and what they may do about it.

The two books of readings show a characteristic often seen in such books. The different chapters vary in quality of writing and content, some being clearly written with challenging and new ideas, others being poorly written. Even more disturbing is the lack of detail and depth with which some topics are developed. Both volumes suffer from a lack of continuity of ideas because of the absence of an over-all conceptual orientation. By the end of each volume, the reader has no sense of having covered the area of alcoholism either comprehensively or in depth. This is particularly unfortunate because both editors were apparently striving for some relatively comprehensive coverage of alcoholism, judging from the tables of content. In fact, Pittman states this in the introduction to his book. Since each book covered areas not mentioned in the other volume, and since there are important areas not covered by either book (for example, the role of significant childhood experiences, the role of industry and the "boss," etc.) the degree of comprehensiveness is limited. The editors of both books could have helped the reader by providing more information about the various authors.

HOWEVER, there are a number of chapters in both books that make serious and substantial contributions to the reader's knowledge and understand-

ing of alcoholism. In the Mendelson volume, the chapters by Howard Blane ("Attitudes, Treatment and Prevention") and Edward Blacker ("Sociocultural Factors in Alcoholism") present some stimulating thinking on the problems of definitions of alcoholism. These writers cast the problem in terms of cultural and attitudinal factors, rather than biochemical factors. The chapter by Morris Chafetz ("Management of the Alcoholic Patient in an Acute Treatment Facility") emphasizes the attitudes toward alcoholics of the helping professions and agencies. Chafetz points to the great need for continuity of care for the alcoholic and the need to break the circular path of "no help" that many alcoholics are trapped into by helping persons.

In the volume edited by Pittman, the chapter by Muriel Sterne ("Drinking Patterns and Alcoholism Among American Negroes") is both detailed and suggestive of research directions. Sterne suggests an hypothesis to account for the increased vulnerability to alcoholism of the Negro female, "... white and Negro females at the same socio-economic level experience different expectations with regard to their assumption of economic and familial roles, and also with respect to the use of alcohol" (p. 72). This hypothesis, taken with the model of social policy as a re-enforcer of deviancy presented by Pittman and Gillespie in Chapter 8 and Blacker's sociocultural hypothesis given in the Mendelson volume (p. 68), suggest some useful directions for research in the etiology and modification of alcoholism. Does "normal" drinking behavior increase the risk of alcoholism? If so, for which segments of the population? Can the study of socioeconomic and familial roles lead to some understanding of the "symptom choice" problem?

Other excellent chapters in the Pittman volume are the chapters by Pittman summarizing relationships between social and cultural factors and drinking practices (Chapter 1), and Maxwell's interpretation of Alcoholics Anonymous (Chapter 15).

Neither the Pittman reader nor the Mendelson collection reports any studies that authors in both books indicate are needed: interdisciplinary research. The

absence of any such studies reflects, probably, the state of research and knowledge regarding alcoholism today: like the alcoholic himself, both fragmented and isolated, with the various bits and pieces needing to be integrated into a more cohesive whole and related to larger bodies of knowledge of personality, learning, biochemistry, and culture.

THE BOOK by the Blums is focused on current methods for the psychological and social treatment of alcoholism. Accordingly, the authors have reviewed the literature dealing with a number of orientations to psychotherapy and other forms of helping relationships with alcoholics, referring liberally to an extensive bibliography. In addition, problems of definitions of "treatment," stages of psychotherapy, evaluation of psychotherapy and recommendations are presented. The authors continually evaluate the various positions being reviewed both in terms of what they believe to be good psychotherapeutic procedures and in terms of their own extensive experiences. Indeed, the most challenging and provocative portions of the book are those in which the Blums present their own positions, particularly in regard to changes in traditional behaviors of the psychotherapist and in regard to utilization of available and potentially available manpower. However, the Blums would have strengthened their arguments by stating explicitly their own therapeutic position, which apparently is a psychoanalytically-oriented one, because their implied position provides them with a point of departure for some of the evaluation of the various psychotherapies they are discussing.

In discussing "unexamined factors in treatment" (Chapter 2), the Blums include a particularly provocative section on the "role of magic" in psychotherapy. Magic is defined as "the practice of thoughts and actions that aim to control events but that evidence no relationship between wish or ritual and the outcome . . ." (p. 12). (Well, clinicians?) If, as the Blums assert the "art" of treatment is not . . . anti-rational . . . nor . . . an invitation to

mysticism . . .," and "... that to be really alive one must be more than a rational animal . . ." (p. 15), can the psychotherapist be the researcher? Can the "meta-rational" of psychotherapy be investigated by "rational processes" of science? While unanswered, the Blums raise these questions rather pointedly and provocatively.

THE SMALL volume by Vallés was written for wives of alcoholics, although others close to the alcoholic have been included in the audience by the author. For the most part, Vallés has succeeded well in this difficult task. The author recommends that his book can be most helpful to wives when used in conjunction with the psychotherapy of the wife (or other family members) and the patient. Vallés explains clearly, with understanding, compassion, and gentleness, the many-faceted behavior of the alcoholic, and the probable responses of the spouse. He is direct and does not try to disguise the negative and unpleasant aspects of behavior of the patient or the spouse. He is reassuring, although this reassurance does seem hollow at times, as reassurance often seems in the face of adversity. Vallés assumes that the readers and patients will be from a middle class background with a relatively intact but troubled family, and with sufficient intellectual and emotional resources to benefit from both psychotherapy and bibliotherapy.

In summary, we have four new books dealing with a subject that is beginning to come into respectability for both service and research. One book (the Blums') sets itself a relatively narrow focus of a survey of treatment for alcoholics but emerges with the broadest perspective of the four books. A second book (Pittman) sets itself a broad perspective (survey of recent scientific contributions), does not accomplish this goal, but does present several important chapters dealing with cultural and other sociological concepts. A third book (Mendelson) does not state a purpose, and, accordingly, cannot be judged in terms of a stated purpose. Several of the chapters do present some significant

CHANGING PERSPECTIVES IN MENTAL ILLNESS

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SOCIETY, PERSONALITY, AND DEVIANT BEHAVIOR A Study of a Tri-ethnic Community

By Richard Jessor, Theodore D. Graves, Robert C. Hanson, and Shirley L. Jessor, all of the University of Colorado

The authors report the development and subsequent testing of an interdisciplinary theory of deviant behavior—especially heavy alcohol use—in a small, rural community

1968

512 pp.

\$9.95



Holt, Rinehart and Winston, Inc.

383 Madison Avenue, New York, New York 10017

concepts dealing with attitudinal and socioeconomic factors influencing both the development of alcoholism and the conditions leading to its amelioration. A fourth book (Vallés) is both the smallest book and probably the most successful book in terms of the author's stated goals, to give wives of alcoholics "hope in the midst of the tragic conditions in which they live" (p. 1).

Redundance in Conventional Roles

James F. Magary (Ed.)

School Psychological Services: In Theory and Practice: A Handbook. Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. xx + 774. \$10.95.

Reviewed by N. L. PIELSTICK

The editor, James F. Magary, is Associate Professor of Education and Chairman of the Department of Educational Psychology, University of Southern California. His PhD is from Indiana University. He is the originator and editor of the annual USC Distinguished Summer Lecture Series in Special Education and he is also editor with Eichorn of *The Exceptional Child*.

The reviewer, N. Pielstick, was one of the first graduates of the doctoral program in school psychology at the University of Illinois and following graduation he was school psychologist in the Everett, Washington, public schools. In 1959 he went to DeKalb County to direct a 3-year project on research and stimulation of teachers' work with gifted children, at the same time holding a part-time appointment at Northern Illinois University. At present he is on leave from Northern

Illinois as Visiting Associate Professor in the Department of Educational Psychology, University of Georgia.

WITH the exception of two reports of conferences, all ten of the books written specifically on school psychology in this country have been published during the present decade, a reflection of the recent and rapid emergence of school psychology and the need for textbooks in this field.

This text is the third edited volume to be published on school psychology (excluding conference reports), both of the other two volumes having been edited by Gottsegen and Gottsegen and published in 1960 and 1963. Most of Magary's contributors have been intimately associated with school psychology and education, while Gottsegen's contributors come largely from other settings and therefore express less of a professional education viewpoint. Nevertheless, there is considerable commonality in the topics covered and all three volumes emphasize the conventional practices of diagnosis or individual case study and the communication of such findings.

The title of this book is rather misleading. There is little, if anything, in the book that can legitimately be called 'theory.' There are ideas and attitudes expressed that may be of value and sometimes positions taken on certain issues, but these can hardly be regarded as theory. Furthermore, this is not a 'handbook' any more than any other book on school psychology, if one takes that term to mean a reference volume. Magary, himself, refers to it as "a symposium (p. vi)," which is a much more suitable label.

Magary claims that, "This book takes the Thayer Conference Report, *School Psychologists at Mid-Century*, as its skeletal structure . . . (p. v)," yet the chapters are concerned predominantly with roles and functions of school psychologists and there is little consideration given to qualifications and training as was done in the Thayer Conference Report. If his intent was to reveal current thinking on functions, qualifications, and training of school psychologists, he has succeeded only in part.

However, he has been more successful in providing "a comprehensive body of information which can serve as an introductory text for the graduate student of school psychology (p. v)," which appears to be his main purpose. There is little question that he has obtained a rather extensive, although not necessarily representative, sampling of spokesmen for school psychology among the 27 contributors. Following a chapter on the development of school psychological services, the contributors discuss school psychologists in urban and community settings, various working relationships, numerous functions of school psychologists, e.g., counseling, case studies, and individual evaluation, the school psychologist's role with various types of exceptional children, his role in research and developing creativity, and finally Magary writes on "The California School Psychologist" and "Emerging Viewpoints." Obviously, these are the customary topics of concern to school psychologists. Only in the final chapter are a variety of less traditional approaches considered.

It seems that the Editor attempted to cover all possibilities of roles and functions but in doing so has developed two major drawbacks. The first, and perhaps most serious from the standpoint of the reader, is the tremendous amount of redundancy. The most glaring example is that of the repeated discussion, sometimes description, of commonly used psychological tests that add virtually nothing new.

The second major drawback is the inclusion of much material that is unimportant or, at least, unessential for the expressed purpose of the book. Certainly, it seems unnecessary to discuss here, for example, treatments of emotionally disturbed children that are then considered to be handled best by non-school personnel (Chapter 15), definitions of exceptional children (Chapter 18), or test characteristics, etc. (Chapter 7). If redundancy were minimized and the unessential material reduced, the book would not only weigh less but would be more readable and pertinent.

Magary has been at least as successful as most editors in minimizing fluctuations among his contributors in difficulty level, presumed sophistication of reader, etc. Each chapter is followed by a list of "Selected Supplementary Reading" that taken as a whole, comprise a rather complete coverage of related literature. Unfortunately, the references are sometimes so incomplete that only a person thoroughly acquainted with this literature could find them. It is unfortunate, too, that the awkward procedure of footnoting with *op. cit.* and *ibid* denotations is used rather than the APA reference style. Also, greater continuity and apparent relevance of the contributions might have been achieved by editorial comment preceding each selection or group of selections.

To sum up, here is a collection of writings, mostly by well-known people in school psychology, who discuss numerous roles and functions that have been traditionally performed by psychologists in public schools. There is much that is useful for consideration by the uninitiated, but little that is new. However, as one student remarked about this book, "... a sometimes genuine interest in an idea or particular area is short-lived when so many impertinent factors are put in." Most instructors will find it desirable to use only selected chapters and thereby reduce somewhat the redundancy and unessential material.



The true realists of any day are the people with vision, the visionaries, who are often described by the "practical" men as being long on hair and short on sense; the visionaries who believe in improving the world as they find it, and are unwilling to accept things simply because they are; the visionaries who have the wisdom to know the difference between the things they cannot change and those they can.

—ASHLEY MONTAGU



Values and Valuation

Vladimir Vondráček

Hodnocení a Jeho Poruchy z Hlediska Psychiatrie (Valuation and its Disturbances from the Psychiatric Viewpoint). Prague: Publication House of the Czechoslovak Academy of Sciences, 1964. Pp. 190.

Reviewed by STANISLAV KRATOCHVÍL

Professor Vondráček is an outstanding figure of Czechoslovak psychology and medicine, with a wide range of interests. He first specialized in pharmacology (1932), worked in internal medicine, in 1948 was appointed Professor of Medical Psychology, and in 1958 became the head of the University Psychiatric Clinic in Prague. He is author of Psychopharmacology (1935), in collaboration, Clinical Toxicology (1954), and Perception (1949). He is preparing a book on the role of myth in human life.

The reviewer, Stanislav Kratochvíl, is a Moravian psychologist who combines clinical practice in a large mental hospital in Kroměříž, with University teaching at his alma mater in Brno.

THE TITLE of Vondráček's volume tells only a part of the story since, in addition to the psychiatric point of view, the author examines his topic from the viewpoints of cybernetics, psychology, and general medicine.

The author defines values as objects and activities that satisfy needs and produce pleasure. Values can be divided into lower and higher ones (e.g., food versus truth or beauty), actual and potential ones (e.g., food for a hungry and for a satiated man). Values awake interests. Frustration takes place when the individual is blocked in his effort to attain a value.

Many processes and problems of normal psychology and various forms of psychopathology are examined with reference to the role of values.

Sympathies and antipathies are viewed as a form of valuation, hope as expectation of values, shame as fear of losing

General System Theory

by Ludwig von Bertalanffy.
University of Alberta

The founder of general system theory presents the first comprehensive introduction to its principles and methodology, and discusses its applications in various disciplines. Contents: The Meaning of General System Theory; System Concepts in Elementary Mathematical Considerations; Advances in General System Theory; The Organism Considered as Physical System; The Model as Open System; Aspects of System Theory in Biology; The System Concept in the Sciences of Man; General System Theory in Psychology and Psychiatry; The Principle of Allometry in Biology and the Social Sciences. November 1968 / 320 pp. clothbound \$9.95 / paperbound \$3.95

—also by Ludwig von Bertalanffy

Robots, Men, and Minds

"An opportunity to learn the essence of von Bertalanffy's ideas about general system theory presented in concise, crisp, and easily understandable language. Part 1 deals with the organicist concept of psychology and biology. In short, reductionism which the author terms the 'robot model of man.' Part 2 explains a new 'Natural Philosophy' which Bertalanffy terms the open system of science, a philosophy to which his major life work has been directed. General system theory is explained carefully both as to what it is and to what it is not."
—Archives of General Psychiatry
1967 / 100 pp. / \$5.00

George Braziller

One Park Avenue, New York, N. Y.

the value of dignity. The forming of value systems reflects the impact of the outer world (the cultural matrix, educative influences, and people's suggestions) but also has some relation to the genotype, the constitution of the subject.

Changes in the value systems are related to problems of mental health and illness in two ways. On the one hand, the loss of values may be a factor in the causation of disease; on the other hand, the change of values may be a symptom of disease. Regaining of adequate values manifests recovery.

THE AUTHOR documents these processes in reference to various forms of psychopathology. In mental defectives and in dementia the values are very primitive. In individuals with psychopathic personality (such as sexual offenders, criminals, and fanatics) faulty values and attitudes are crucial.

Some neuroses, reactive states, and psychosomatic diseases have their origin in threatened values. The overevaluation of one's health leads to hypochondriacal tendencies. In a deep depression often a complete loss of values takes place, including the value of one's own life. In schizophrenia there is a change in values under the influence of hallucinations and delusions.

In general medicine the problems of values and valuation are also important. Putting the patient to bed, ordering a diet, hospitalization, various diagnostic and therapeutic measures, loss of effectiveness and eventually the necessity of a long-term change in the way of life are facts that compel the physician to take into account the values of the patient, if he is to treat him not purely as a biological organism but as a psychosomatic unit.

Psychotherapy can frequently be viewed as a correction of the scheme of values. It consists of offering new views on values, removal of negative values, and broadening the patient's horizons. In mental health programs decisive attention should be paid to the development of a socially and individually adequate hierarchy of values and creating an equilibrium between the needs of individual and the society.

The book is written in a vivid style.

Aphoristic reflections are more typical than exact definitions and systematic explorations. The volume represents a fresh view on what is known rather than original scientific discovery.

Poverty: Its Impact on Education in the Affluent Society

Harold W. Bernard and Wesley C. Huckins (Eds.)

Readings in Human Development.
Boston: Allyn & Bacon, 1967. Pp.
x + 470.

Reviewed by JOHN E. WATSON

Both editors are associated with the Oregon State System of Higher Education. Bernard is Professor of Education, Division of Continuing Education. He received his PhD from Northwestern. Huckins is Associate Professor of Education, Division of Continuing Education and received his PhD from the University of Wyoming.

The reviewer, John E. Watson, received his PhD from the University of Denver in 1960. He is now Chief, Audiology and Speech Pathology Service, VA Hospital, Palo Alto, California. His early professional experience was with the public school systems in the areas of psychology and special education.

AGREEMENT is almost unanimous among editors of books of readings regarding the primary purpose of such works, i.e., as an aid to the intellectual growth of students. The editors of the present collection subscribe to this basic justification, with the following amplification: Human development,

which in the past has been considered primarily an area of psychology, is now widely discussed in the publications of many fields. With this accelerated accumulation of knowledge, there is a need to integrate the knowledge from these various sciences, and for the student of pedagogy to become aware of the relationships between work in these areas and the educational process.

The editors have therefore made an effort to incorporate some of the more pertinent information from these diverse sources into the area of human development. In doing so, various subjects that are not generally treated under this heading appear prominently in this set of readings. One of these pertains to the War on Poverty, i.e., the association of environmental effects upon intelligence and the importance of adequate early stimulation. A closely related subject receiving considerable attention is socioeconomic status, important from the standpoint of recent federal legislation and local community action programs.

THE primary reason for books of readings may apply to student growth, but there is also the instructor to be considered. The careful selection and logical arrangement of the papers in this book indicates considerable thought in this regard. In order to provide a frame of reference and to widen the reader's interpretive background for the material, brief but cogent essays precede each of the sixteen substantive sections. The articles themselves are up-to-date, comprehensive, and readable. All articles are referenced, and there is an author as well as subject index. Also included is a list of correlated reference texts for use with the *Readings*, which should prove useful in class assignments, and may serve to introduce the student to informative sources from other fields.

Although my over-all impression of this collection of readings was favorable. I must confess to having some reservations, albeit minor ones. Some areas have received little or no attention, and certain investigators who have become the nexus of a wide range of subsequent work in the area of human development have been omitted. However, realizing that the integration of data from diverse

sources rather than total coverage was the primary purpose of the collection tends to negate these objections.

In summary, the editors have done a commendable job of accomplishing their initially stated purpose with this collection of readings. The volume is distinctive in that, although treating the area of human development over-all, it is focused on several subjects that, from the standpoint of pedagogy, are relatively new. The list of correlated reference texts should be of considerable value to both instructors and students.

Neurology, Romantic Style

Carl H. Delacato

Neurological Organization and Reading. Springfield, Ill.: Thomas, 1966. Pp. ix + 189. \$7.50.

Reviewed by JOSEPH M. WEPMAN

The author, Carl N. Delacato, is Director, The Institute of Reading Disability, and Associate Director, The Institute for the Achievement of Human Potential, Philadelphia, Pennsylvania. He is author of *The Treatment and Prevention of Reading Problems*, and *The Diagnosis and Treatment of Speech and Reading Problems*, and co-developer with G. and R. Doman of the *Doman-Delacato Developmental Profile*.

The reviewer, Joseph M. Wepman, is Professor of Psychology and Surgery and Director, Speech and Language Clinic and Research Laboratory at the University of Chicago. His research is in aphasia, language development in children, and the perceptual basis of

learning. He is a Fellow of the American Psychological Association and the American Speech and Hearing Association, and President of the Illinois Psychological Association.

FOR perhaps the first time in the history of our country, to be educated is the prerogative of every member of society. Education is the way out, the way up, the sure thing when other values are distorted, the priceless ticket to ride high in this world of ours. In our society, to be educated is also to be able to read. Yet, our schools report that at least twenty and perhaps as many as thirty per cent of the student population show serious deficiencies in reading ability. Research on this impelling social fact has seemingly pointed in a variety of directions while remediation schemes have had only limited success. For that part of the population who are most directly involved emotionally, the mothers and fathers of the child having difficulty with reading, the need to find a cause and cure frequently represents a virtual panic situation.

Delacato claims in his book to have answered that need. In this his third pronouncement in book form within the past decade, he restates his theory of 'neurological organization,' offers a philosophical foundation for the theory, and reports research implying the scientific validation of the theory. The theory he presents continues to be neither very 'neurological' nor very 'organized.' The use of such terms as 'pons,' 'cortex,' and indeed 'neurology' itself do carry a relatively potent impact but do little to show a neurophysiological relationship with the cognitive function involved in reading. In all fairness it should be pointed out that the neurophysiological substrate for any language function is literally unknown and it may be that as knowledge in this area increases Delacato's conjectures may prove to have validity. At the present, however, the neural role in learning to read must be classified as an assumption, especially in the sense of specificity.

Delacato holds that lateral dominance in the central nervous system is evolution's highest point and is responsible for man's language ability, including all of the facets of spoken and written lan-

Ecological Psychology

Concepts and Methods for
Studying the Environment
of Human Behavior

ROGER G. BARKER

It is the purpose of this book to provide concepts, field methods, and analytical programs for investigating human molar behavior and its environment in real-life situations. Empirical evidence is presented to show that behavior settings do in fact constitute the relevant environment of human molar behavior, and methods of identifying behavior settings and determining their attributes are given in detail. Finally, a theory of the relationship between behavior settings and behavior is developed. \$7.50

Social Welfare in the Soviet Union

BERNICE Q. MADISON

Based on over ten years of research and observation, this is the first comprehensive study in any language of social welfare in the Soviet Union. It includes an account of welfare practices prior to the Revolution, an analysis of the relationship between Soviet welfare policies and Marxist theory, and a history of Soviet welfare programs from 1917 to the present. The institutional framework of the system is described, and several case studies illustrate the implementation of present policies. \$8.50

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guage. In an explanation fascinating for its assurity in the face of occasional rank implausibility and lack of evidence, he portrays the phylogensis of language function, its dependence upon the evolution of lateral dominance and its recapitulation in charming literal terms in ontogenetic development. Dominance, says the author, is established by proper childhood experiences. These involve the position in which babies sleep in their cribs, the manner and pattern of their creeping and crawling, and even how much music they hear. If a child cannot learn to read well he has failed to develop his dominance to the proper level. Evolution, it appears, failed the child but practice will make up for the ontogenetic failure.

HAVING by this means taken care of the 'cause' of reading disorders (and a host of other difficulties), Delacato declares the 'cure' to be simply a matter of going back and establishing better dominance (neurological organization) by getting those experiences that we missed as children. The road to recovery is not only as painless as a few prescribed exercises but it takes a relatively short time to recapitulate eons of phylogeny and years of ontogeny. What the theory lacks in elegance and knowledge of neurology, anthropology and psychology, it makes up in romance.

The 'proof-of-the- pudding'—the research reported in the remainder of the book—implies that the empirical evidence for the theory is now at hand. Ten studies, all supporting the thesis, are reported. To the reader even moderately familiar with research design and adequate scientific inquiry these reports are a revelation. Many of the studies failed to include control subjects. Those that did showed most inadequate matching between control and experimental groups. Misapplication of statistical procedures and over-interpretation of results are common. Glass and Robbins (1967) devote some fifty pages of a recent article to a criticism of this aspect of the research reported in this and other Delacato research. They conclude, in part, that "none of the experiments that Delacato esteems is, in fact, sufficiently well designed, con-

trolled, analyzed, or reported so as to constitute a valid piece of scientific evidence." Perhaps the most disconcerting feature of this section of the book, however, is its tenor of devotion, not to 'science,' but to the 'movement.' The book itself is dedicated to the ten researchers and the studies sound like testimonials to the author. If the research itself were flawless, this frank bias would cast some doubts on the findings. This reviewer would need to agree with Glass and Robbins: "That Delacato and the authors of the studies which he reprinted did not refer to any of the published studies which show results contradicting their own was a major oversight."

Learning to read remains a complex cognitive task. Nothing offered in the present volume reduces this complexity. Coordinating the movements of the body in a patterned manner may and probably does lead to improved coordination of movements of the body. Attention focused on the child by his parents during the period of intensive exercise may be most rewarding (both to the parents and to the child) but whether it has any effect upon higher mental processes in a direct way has yet to be demonstrated.

REFERENCE

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The Unknown Soldier

Berthold von Stokvis

Kultur-Psychologie und Psychohygiene. Stuttgart: Hippokrates Verlag, 1965. Pp. 169.

Reviewed by IJA N. KORNER

The author, Berthold von Stokvis, was a Dutch-Jewish physician-psychia-

trist. During the Nazi era he worked with Jewish patients prior and during their transportation to Eastern Germany and beyond.

The reviewer, Ija N. Korner, obtained his first view of psychology in his undergraduate years at the University of Geneva. He saw the first year of the war from France. He received his PhD from Columbia and is now Director of Research, Center for Training in Community Psychiatry, Los Angeles.

THERE would be little to say about this collection of essays and research attempts in the area of medical psychology if, while reading, one could stay objective and purely professional. The author, a psychiatrist, has died, and the volume is published in memoriam.

There are some interesting but dated, clinical articles ("Social and Group Therapy in Relation to Individuals Suffering from Asthma," "The Meaning of the Punishment Situation in Education," and others), and there are some essays on subjects like "The Individual and The Mass," "The Meaning of Collective Guilt Feelings as the Result of Anti-Semitic Excesses," "Observations of an Amsterdam Psychiatrist During the Nazi Occupation of 1940-1945," and others of this rather unusual vein. In reading the latter, it becomes increasingly difficult to stay "professional" and to disregard the emotional concomitant aroused in the reviewer. Once acknowledged, the human reaction to the material makes one feel like saying a lot about this slender book and its author. The Jewish author lived through the Nazi occupation of Amsterdam. His patients were the future inmates of extermination camps. They came to him with their psychological ills and tortures and, to the very end of his professional functioning, in the face of the absurdness of saving individuals from the consequences of their all too realistic fears, he tried to help, to heal, to do what he was trained to do. His "Psychiatric Observations," written in the formalism of a scientific report, can not hide the horror of his practice, nor the stern courage of his professional conviction. One needs to stand in awe of the power and capacity of the ego in an age where interest is focused on its failures.

In the years following the war, the author in his papers permits us a look at a man who must come to terms with the persecutions he suffered, the human elements that perpetrated them. ("The Significance of the Collective Guilt-Complex in Anti-Semitic Aggression," "The Jew as a Symbol," "A Psychologic-Semantic Inquiry Into The Concepts of 'Group-Tension' and 'Group-Relaxation,'" "Investigations Into Feeling Lost-Deserted").

As an intellectual, he generalizes his attempts to make comprehensible to himself and to others what, essentially, can never be fully understood. The author's cognitive ego is hard at work. It supplies reasoning, erudition, occasional anger but, above all, genuine attempts at understanding the human being under the press of social forces, about which he has little control. Perhaps most admirable, at the end of one essay, badly reasoned but strongly felt, he advances some hope that such excesses of the human mind as Nazism and human persecution, in the long run, can somehow, somewhere, be avoided.

This book should be read by the many who have become a bit skeptical, and even cynical, about psychotherapists by the practitioners of the art and science of clinical psychology, who occasionally experience doubts about their activities. Here is one of the many unsung and badly needed heroes of the profession.



When the great innovation first appears, it will almost certainly be a muddled, incomplete and confusing form. To the discoverer himself it will be only half-understood; to everybody else it will be a mystery.

—FREEMAN J. BRYSON



Psychotherapy in Schizophrenia

Eva Syřišková

Možnosti a Meze Psychoterapie Schizofrenního Onenocnění (Possibilities and Limitations of Psychotherapy in Schizophrenia). Praha: Publishing House of the Czechoslovak Academy of Sciences, 1965. Pp. 99.

Reviewed by STANISLAV KRATOCHVÍL

The author, Eva Syřišková, is Assistant Professor of Psychology at Charles University in Prague. She has worked as a clinical psychologist in a psychiatric hospital and, since 1953, has been concerned with the psychotherapy of schizophrenic patients. A new edition of her textbook, *Special Questions of Medical Psychology*, has just been published.

The reviewer, S. Kratochvíl, is Assistant Professor of Psychology at the J. E. Purkyně University in Brno where he directs clinical training in psychodiagnostics and psychotherapy. At the same time he works as a clinical psychologist in a large psychiatric hospital in Kroměříž. He has written a textbook on general psychotherapy and another one on research in psychotherapy.

THIS monograph begins by a survey of the historical development and the present state of psychotherapy of schizophrenia, commencing with Freud, Janet, and Jung, and ending with existential analysis and the present views of Soviet psychotherapists.

The author regards schizophrenic psychosis as a disease of complex etiology in which psychogenic influences can play a part. The patient's interaction with his social environment is seriously disturbed. As regards emotional deprivation and trauma of early childhood, the author suggests that it is not the original traumatic situation in itself but the way the patient experiences and evaluates it that is crucial. The patient's history has to be considered in terms of his present situation and outlook.

The main principles of Syřišková's eclectic psychotherapeutic approach are as follows:

1. The therapeutic relationship is of crucial importance. It is a framework for a complex process of learning and reeducation, the basis for the formation of new, positive interpersonal relationships.

2. For purposes of breaking the autistic barrier the author recommends the use of stimuli close to the patient's imaginary world. The relation to reality is to be rebuilt by means of the patient's own ideas. The therapist has to include himself in the patient's world, without blocking the patient's return to reality.

3. Any deep analysis is considered undesirable, especially in the initial, acute phase. In her practice the author discusses with the patient his unrealistic constructions in the patient's own terms and framework. The early traumatic situations are analyzed only in connection with the patient's present assessment of them.

4. Strengthening of the conscious control of behavior should weaken the patient's autistic phantasies. His attention is directed toward new and for him emotionally attractive goals that he is able to achieve, e.g., social recognition.

5. The patient has to feel that he is not incomprehensible. At the same time the therapist must prevent him from developing excessive emotional dependence.

6. The therapist is an active agent, not a passive observer. He actively teaches the patient to communicate with his environment.

7. In some cases it may be useful to develop in the patient the attitude of an impersonal spectator in reference to difficult life situations and to his hallucinations and delusions. He may be helped by viewing them as an object of exploration or as an interesting play.

8. In treating patients with simple schizophrenia the author often uses the medium of graphic and plastic art. In paranoid forms she endeavors to paralyze the patient's aggressive impulses by means of changing his attitude toward his hallucinations and delusions,

to isolate them. The delusions then remain in the patient's personality as a "foreign body" which ceases to have an emotional impact.

The psychotherapeutic procedures are illustrated by the case studies of two schizophrenic patients (selected from 24 treated cases) in which psychotherapy was applied successfully after an unsuccessful biological treatment.

The work stresses but does not exaggerate the role of psychogenic factors and psychotherapy in schizophrenia. It is stimulating, critical and thorough, in spite of its brevity.

His research for the past five years has been on the social determinants of psychopathology in the Mexican-American population.

IN the past two decades, research studies have been increasingly directed to the study of the social and cultural determinants of behavioral disorders. On the one hand, this focus has been stimulated by theoretical developments in the social sciences represented by the work of Parsons, Merton, and others. On the other hand, American social scientists, functioning in the environment of a democracy, have been progressively frustrated by therapeutic techniques that, at best, are relevant to a small minority of the population. Add the recent political concern with the fate of the poor to these theoretical and social determinants, and it becomes almost inevitable that research and clinical interest in the mental health field should begin to dwell upon the problems of the mental health of the poor.

The volume to be reviewed is one expression of this interest. In a technical sense, the book does not focus exclusively on the mental health of the poor but on the deviant behavior of this class. Its contents are relevant not only to mental disease but also to delinquency, drug addiction, and other behavior alien to the morality of the dominant white American middle class.

Fifty-eight papers are included. Many are reprints from books and journals in sociology; several are taken from psychiatric sources; a few come from psychological and trade union publications. The book is divided into four major sections: 1) "Social Class and Mental Illness: A Complex Relationship," 2) "Low Income Behavior and Cognitive Style," 3) "Psychotherapeutic Approaches For Low Income People," and 4) "Rehabilitation Of The Criminal, The Delinquent, and The Drug Addict." The basis for the selection of papers and their arrangement is unclear. For example, a paper by Beker, Eliasoph, and Resnik on diagnostic testing using social situations that appears in Part II appears to be completely unrelated to the major concern of this section or, for that matter, the volume as a whole.

EACH of the four sections is prefaced by introductory essays that fail to bring any discernible conceptual unity into the problems discussed. Thus, in the introductory essay to Part I, the editors state that two papers included in the book, Miller and Mishler's review of Hollingshead and Redlich's *Social Class and Mental Illness* and the excerpt from Langner's *Life Stress and Mental Illness*, come to different conclusions about the relationship of mental illness to social class. The editors make no attempt to discuss this difference.

The quality of the individual papers varies widely. A frequent error in Part I is that several authors, Miller and Mishler and Brill and Starrow, for example, are confused about the statistical problems involved in multiple comparisons and appear to be unaware of recent solutions by Tukey, Scheffe, and others. There is no brief offered here that one must always use statistics in social psychiatric investigations, but if one chooses to play the numbers game he should learn and abide by the rules.

Perhaps the most important substantive conclusions of most of the papers in Part I is that the prevalence of psychosis is greater in the lowest social class and that the quantity and quality of treatment provided this class is discriminatory. Part II, which deals with low income behavior and cognitive style, is good on behavior but poor on style. The major message of the papers on behavior by Herbert Gans, Jerome Cohen, and S. M. Miller is that there are similar behavioral patterns among all types of the poor but that there are also differences. The emphasis in this volume upon different types of poor people is a welcome improvement on Oscar Lewis's view that the culture of poverty is invariant throughout the world. Papers by Martin Deutsch and Frank Riessman on cognitive style present little carefully controlled data and are marred by foggy phrases such as "preliminary findings while not conclusive are suggestive."

The remaining sections of the volume are concerned with group therapeutic approaches to the poor and contain stimulating papers by Warren Haggstrom,

Them That Has, Gits

Frank Riessman, Jerome Cohen,
and Arthur Pearl (Eds.)

Mental Health of the Poor: New Treatment Approaches for Low Income People. New York: Free Press, 1964. Pp. xv + 648. \$9.95.

Reviewed by ARNOLD MEADOW

The first editor, Frank Riessman, is in the Department of Psychiatry at Albert Einstein College of Medicine. His PhD is from Columbia. The second editor, Jerome Cohen, is Associate Professor at the School of Social Welfare, University of California, Los Angeles. His PhD is from Syracuse. The third editor, Arthur Pearl, is Professor of Education, University of Oregon.

The reviewer, Arnold Meadow, received his PhD from the Department of Social Relations, Harvard University. He is at present Professor and Director of the Clinical Psychology Training Program at the University of Arizona.

ESSENTIAL TITLES



WORDS, MEANINGS, AND MESSAGES

THEORY AND EXPERIMENTS IN PSYCHOLINGUISTICS
by **RAGNAR ROMMETVIET**, *Institute of Psychology, University of Oslo, Oslo, Norway*

A comprehensive treatment of verbal communication based upon recent theoretical and experimental advances in the field of psycholinguistics. The author establishes a unitary conceptual framework within which he investigates the major issues in psycholinguistics.

1968, 329 pp., \$12.50

CUES, DECISIONS, AND DIAGNOSES:

A SYSTEMS-ANALYTIC APPROACH TO THE DIAGNOSIS OF PSYCHOPATHOLOGY

by **PETER E. NATHAN**, *Harvard Medical School, Boston, Massachusetts*

Discusses how systematically collected, reliably codified, and consistently evaluated descriptions of behavior can be relevant and sufficient for the valid diagnosis of psychopathology. This book presents techniques for eliciting the data which result from a competent diagnostic examination and the decision rules by which this data must be organized for diagnostic purposes. This book includes documented emphasis on the pragmatic and heuristic values of the diagnostic process for psychiatry and clinical psychology, explication of consensually validated cues to psychopathological behavior, and organization of these cues into decision models by which they can be integrated for diagnosis.

1967, 244 pp., \$10.50

DERANGED MEMORY

A PSYCHONOMIC STUDY OF THE AMNESIC SYNDROME

by **GEORGE A. TALLAND**, *Massachusetts General Hospital*

An account of the most extensive investigation ever conducted with a group of patients in the chronic state of Korsakoff's Disease. The study, which consisted of the examination of over twenty patients on forty or more occasions, was designed to test specific hypotheses about disturbances characteristic of the amnesic syndrome and the processes involved in normal memory function. Hypotheses related to certain current theories of psychology and neurophysiology were subject to critical study. The book includes a review of the literature published in five languages on the psychopathology of the Korsakoff syndrome, data on the performance capacity of the patients in over one hundred experimental tasks, critical examinations of confabulation in both chronic and acute phases of the amnesic syndrome, and an empirical evaluation of certain explanatory models proposed by other investigators and by the author himself.

1965, 356 pp., \$9.50

NEGRO AND WHITE CHILDREN

A PSYCHOLOGICAL STUDY IN THE RURAL SOUTH
by **E. EARL BAUGHMAN** and **W. GRANT DAHLSTROM**, *University of North Carolina*

A Volume of *Social Psychology*
A series of monographs, treatises and texts
edited by **Leon Festinger** and **Stanley Schachter**

Reports the scientific conclusions of a unique four year study of racially-segregated students in a rural, economically-de-

prived area of North Carolina. The authors discuss the results of their multi-dimensional, large-scale, cross-sectional studies of ability, achievement and personality characteristics. In the conclusion, the authors apply their findings to designs for action programs.

1968, 550 pp., \$15.00

PAIN

A PSYCHOPHYSIOLOGICAL ANALYSIS

by **RICHARD A. STERNBACH**, *University of Wisconsin Medical School, Madison, Wisconsin*

"His [Sternbach's] analysis includes a meticulous and critical review of recent literature on pain and leads him to the well supported conclusions that pain cannot be understood in any single framework reference."

From the Foreword by Stewart Wolf, M.D.

Reviews in a lucid and readily comprehensible style, the recent literature on the neurological, physiological, behavioral, and emotional descriptions of pain. The author considers the applications of these findings to specific "paradoxes" of pain: insensitivity to pain, phantom limb pain in amputees, and hypnotic and placebo pain relief. This analysis examines the essential mechanisms which appear to be consistent with the several approaches to the subject, and suggests hypotheses for further experimental research and clinical patient care.

1968, 185 pp., \$8.00

PERSONAL CAUSATION

THE INTERNAL AFFECTIVE DETERMINANTS OF BEHAVIOR

by **RICHARD De CHARMS**, *Washington University, St. Louis, Missouri*

Selecting from the latest published and unpublished research, the author analyzes and integrates the current psychological evidence concerning human motivation within the context of certain philosophical presuppositions of modern behavior theory. The author suggests that the weaknesses of most current theories of motivation result from a paramechanical concept of causation. Viewing man instead as a non-mechanical locus of causality, he discusses affective relationships in animals and man, the measurement of human motives, the social psychological process of attributing motives, and the effects of freedom versus constraint on individual behavior.

1968, 398 pp., \$13.50

THE ANATOMY OF ACHIEVEMENT MOTIVATION

by **HEINZ HECKHAUSEN**, *Psychological Institute of Ruhr University, Essen, Germany*

Translated from the German by **D. C. McClelland, R. C. Birney, and K. F. Butler**

A Volume in *Personality and Psychopathology*

A Series of Texts, Monographs and Treatises

The first monograph to review the empirical studies dealing with achievement motivation within a unifying theoretical framework. It will acquaint the reader with the results of research carried out abroad as well as in the United States.

CONTENTS: Introduction, Content Analysis, Evaluative Dispositions (Value Attitudes), Important Dimensions of Experience, Conflict, The General Structure of Goals and Performance, Foreperiod, Values and Motive Arousal, Goal Setting and Level of Aspiration, The Performance Period, The Post Performance Period, Accomplishment, Origin and Development of Achievement Motivation, Concluding Remarks. **AUTHOR INDEX SUBJECT INDEX**

1967, 215 pp., \$5.95

ACADEMIC PRESS



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CONTEMPORARY RESEARCH IN OPERANT BEHAVIOR

Selected Readings

Edited by A. C. CATANIA, New York University

This comprehensive collection of readings covering the major topics in operant conditioning illustrates current research in the experimental investigation of behavior and relates developments in operant research to the field of psychology in general. The research papers, introduced with commentary by the authors, are organized to parallel the sequence of topics appropriate to a thorough coverage of the principles of operant behavior. Successive sections of the volume—containing discussions of reinforcement schedules, stimulus control, conditioned reinforcement, aversive control, and operant and respondent behavior—build upon the research material that has gone before in presenting a development of contemporary investigations of the experimental analysis of behavior. Although the major concern of the text is operant behavior, with emphasis upon animal learning, a latter section is dedicated to a discussion of the relationship between operant and respondent behavior, and two concluding sections cover the applications and implications of operant conditioning techniques and research in experimental psychology. The book also features a comprehensive introduction by the editor, an extensive glossary of technical terms from the readings, and an alphabetized index of references. 384 pages, illus., softbound, prob. \$4.95

THE COGNITIVE CONTROL OF MOTIVATION

Theoretical Analysis and Experimental Research

Edited by PHILIP G. ZIMBARDO, New York University

This book investigates the extent to which man can exert control over his own biological drives and social motives and combines a cognitively oriented theory with a vigorous experimental approach. The same basic hypothesis was tested and expanded using a wide range of primary and secondary motives and a variety of dependent variables representing several levels of analysis. Consistent results were obtained for all, as predicted from Festinger's cognitive dissonance theory, and contrary to prediction from reinforcement theory. Ready January 1969, approx. 288 pages, illus., prob. \$7.00

George Breger, Rudolph Wittenberg, Arthur Pearl, Lamar Empey and Jerome Rabow, Rita Volkmen, and Donald Cressey and Walter B. Miller. Although the theories and methods of these investigators differ, they all utilize the device of organizing groups as a method for stimulating personality growth and reducing deviant behavior.

The problem of poverty is probably the most crucial and difficult problem of our time. While it is still too early to evaluate the results of much of the work included in this volume, the novelty and variety of ideas described provide ample testimony to the vitality of contemporary social science therapeutic approaches to the problem of the deviant behavior of the poor.

One Measurement after Another

Károly Ákos and Magda Ákos

The Critical Flicker Frequency Series Effect. Budapest: Akadémiai Kiado, Publishing House of the Hungarian Academy of Sciences, 1966. Pp. 245. \$7.50.

Reviewed by HOWARD D. BAKER

The first author, Károly Ákos, is a senior research fellow of the Hungarian Academy of Sciences, and is a founding member of the Hungarian Scientific Psychological Society. He received his MD degree in 1942 from the University of Budapest, and since that time has published over 150 papers and 12 books, largely devoted to the problems of consciousness, and of the working capacity of the brain. In his efforts in the latter field his coworker has been his wife, Magda Ákos, MA. The present book reports some of their joint research.

The reviewer, Howard D. Baker, is

Dallas
Oakland, N.J.

Atlanta

Glenview, Illinois
Palo Alto

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College Division

Professor of Psychology at Florida State University, and is a long-time member of the National Research Council-Armed Forces Committee on Vision. His research is in the area of visual adaptation.

WHEN a series of measurements are made of the flash rate at which a flickering light just appears fused into a steady beam, some variability is usually noted in the individual measurements of the series. The variations are customarily treated as unwanted random error, and are averaged out to yield a single mean score for the series. Now we have a research monograph in which Károly and Magda Ákos argue that the variations in a series of measurements of the critical fusion frequency follow a significant pattern capable of analysis into factors directly reflecting fundamental characteristics of the nervous system. The argument is detailed and is painstakingly supported by data, and it is the sole message of the volume. The book is a research report, too extensive and detailed for regular journals. It will certainly have as its major audience those specialists in vision and physiological psychology who are likely to pick up the research program themselves, or who will at least file away the data against the possibility of doing such research in the future.

A limited audience is virtually guaranteed by the many pages of unfamiliar graphs in the book. That is a shame; there is more here than the overt message. Upon finishing the book, the reader cannot avoid agreeing that any series of critical fusion frequency measurements is unlikely to be random, and this conclusion casts a serious doubt on all "random" series of measurements on a subject. To what extent do all of our series-measurements such as dark adaptation or light adaptation include such a confounded series effect?

The authors' analysis of the nature of the effect is less convincing. The general course of the effect appears to be a drift from higher critical fusion rates to lower, with counter-drifts appearing at times, and with consistent increments following interruptions. Ákos and Ákos account for the effects in

terms of three hypothetical factors: one that decreases the critical fusion frequency, and two that raise it. Two additional factors are also postulated to account for the smaller variations in the series.

Such a complex theory is unimpressive. It is difficult to imagine possible

curve shapes that could not be fitted by so many hypothetical variables. The complaint may be carping, however, because the book clearly is concerned principally with the significant point that a series of critical flicker measurements follows a systematic non-random course.

Games Neurons Play

Roger W. Russell (Ed.)

Frontiers in Physiological Psychology. New York: Academic Press, 1967. Pp. xv + 261. \$8.50.

Reviewed by EMANUEL DONCHIN

The editor, Roger Russell, is now Vice Chancellor, Academic Affairs, University of California at Irvine. He came to this position from Indiana University, where he was Chairman, Department of Psychology before becoming Dean of Advanced Studies. He also has been Head, Department of Psychology, University College of London University and Executive Officer of the American Psychological Association. His PhD is from the University of Virginia and his interest in the general field of physiological psychology has been a consistent focus for his work since his undergraduate days.

The reviewer, Emanuel Donchin, is an Associate Professor of Psychology at the University of Illinois, Urbana. He was born in Tel Aviv and did his undergraduate work at Hebrew University, Jerusalem. His PhD under D. B. Lindsley is from UCLA and he formerly was Research Associate, Division of Neurology, Stanford Medical School and California.

WHEN evaluating this book for what it is, namely a collection of review papers, it deserves much praise. The authors of the reviews are all distinguished and active investigators in the field of physiological psychology. Each has much of interest to tell about his own and other investigators' research. Most of the papers are readable and clear and they cover the assigned topic comprehensively. In other words, all the chapters in this book would have made excellent papers for a learned journal.

However, this book can and should also be evaluated in terms of what it is trying to be. In the preface, Russell informs us that the book has been assembled in order to make knowledge at the new frontiers (of physiological psychology) "readily available to students and to colleagues who are interested but not actively engaged" (in this area of research). We are dealing then not with just another addition to the ever increasing collection of "Contributions to . . .," "Advances in . . .," or "Cur-

rent problems of . . ." that have been emanating from various publishing houses. We are dealing rather with an attempt to provide an introduction to the current goings on of the "frontiers" of physiological psychology. To succeed in this task, this book must meet at least two requirements. The topics covered should indeed be at the "frontiers" of the field and the papers should make the research accessible to the intended audience.

I believe the book does meet the first criterion. Not because the topics covered are the only appropriate topics. It is easy to mention highly active and significant areas of research that are not covered; the work on paradoxical sleep is but one example. In fact, the specific selection of topics is secondary to the major trend unifying the diverse papers—namely the conception that the nervous system is an information processing device. The acceptance of this proposition has had a profound influence on the directions research in physiological psychology has taken in the last two decades. It is this influence that is apparent in all the papers contributed to this volume.

It is not that research is now dealing with new problems. On the contrary there is hardly an issue raised in this volume that has not been raised by Helmholtz and his contemporaries. There is also very little that is truly novel in the methodology. As W. Ross Adey remarked in a recent symposium, "The tools that can be used to delicately and precisely modify brain systems are few and hazardous. They have grouped themselves in the last 50 years into the pitifully few categories of stimulation, ablation and electrophysiological recording" (Kimble, D. P., *The Organization of Recall*, New York Academy of Sciences, 1967). This observation is fully borne out by the research reports collected in this volume, in spite of the considerable technological refinements described by all the authors.

THE most notable feature of the "new frontier" in physiological psychology is brought out quite clearly in the book's most "traditional" paper—Mishkin's report on visual mechanisms

beyond the striate cortex. This is a review of work in the classical tradition. (In fact, Mishkin is the only one of the seven authors who refers extensively to the *Journal of Comparative and Physiological Psychology*). He reports a series of classical ablation studies. These studies were classical in the sense that the investigators measured changes in behavior as a function of damage inflicted on the nervous system. The outstanding characteristic of this series of studies is that the choice of experiments, the choice of lesions at various stages, and the logic in which the experiments progress from one stage to the next, all are presented in terms of information that need, or need not, be transmitted between various brain structures.

Thus one of the major changes in the thinking of physiological psychologists derives from the realization that information is a commodity that can be handled by a machine, that information can be accepted, stored, processed in a variety of ways, and transported, and that the nervous system is engaged in precisely these activities. Physiological psychology has been transformed by this realization from being a rather irrelevant search for physiological "substrates" or "correlates" of behavior to a study of information processing by the nervous system.

This theme runs through most of the reports in this book. From Bullock's unusually lucid exposition of the "hardware" into which the input and output information must be translated in order to be available to the nervous system, through De Valois's descriptions of attempts to break the code whereby visual messages are transmitted, to Russell's discussion of possible macromolecular information storage mechanisms.

It should be said that the theme of information processing is implicit rather than explicit in the book. The papers are presented and the reader is left to derive his own conclusions. This brings up the second criterion for the book's success mentioned above—namely the degree to which the papers are properly written for the intended audience. This of course is difficult to answer. The

editor of this volume does not provide the reader with any special guidance. There is but a brief introduction, no commentary placing the papers in perspective and pointing to their interrelations and no obvious attempt to avoid difficult terms. However, as most of the papers are quite clearly written, this is not a major drawback.

A more serious flaw in a book intended for those outside this field is the one-sided presentation of controversial issues without any attempt to indicate that a controversy exists. For example, Hernandez-Péon in a paper on the physiology of attention, reviews in detail work done in his laboratory in the last ten years. The review is detailed, starting from the famous cat and mouse tryptich and getting to work done just prior to publication of this volume. What is missing from this review is any acknowledgement of the fact that such investigators as Gabriel Horn at Cambridge and Worden at UCLA have raised some serious questions about the reviewed research. While they may be wrong, it is improper to ignore the controversy.

Psychological Testing A Partial View

Benjamin Pope and Winfield H. Scott

Psychological Diagnosis in Clinical Practice: With Applications in Medicine, Law, Education, Nursing, and Social Work. New York: Oxford University Press, 1967. Pp. x + 341. \$8.00.

Reviewed by NORMAN HARWAY

The first author, Benjamin Pope, has a PhD from the University of California, Berkeley, and has taught at the University of British Columbia and Washington University Medical School. Now he is Professor of Medical Psy-

chology and Director of Psychological Services in the Psychiatric Institute at the University of Maryland School of Medicine. The second author, Winfield H. Scott, is Head of the Clinical Psychology Unit in the Adult Psychiatry Branch of NIMH. His PhD is from Pennsylvania State University. At the time of writing the book, he was associated with the University of Maryland School of Medicine.

The reviewer, Norman I. Harway, has just moved to the University of Pittsburgh where he is Professor of Psychology. He was for a number of years Professor of Psychiatry (Psychology) and Head, Division of Psychology, in the Department of Psychiatry, School of Medicine and Dentistry, University of Rochester. His PhD is from Rochester and he was formerly Research Associate in Psychology at the University of Michigan. His interests are in graduate and postdoctoral education in clinical psychology and he has been engaged in clinical work with children and adults.

THERE is in each of us the tendency to see our own activities, problems, and roles as representative of the groups to which we belong. It is not unusual, then, that this book, written by two able clinical psychologists and clinical teachers in a university department of psychiatry, should be oriented toward the diagnostic and consultative issues that face the psychologist in that setting. Accepting that limit, this is a useful and interesting volume that will be of special value to medical students and psychiatric residents and to those who teach them about the use and contributions of psychological testing. The variety of case materials and test reports used to illustrate and explicate the psychologist's contribution to diagnosis will also be read with profit by clinical graduate students and practitioners.

The book is divided into two sections: Theoretical Foundations and Clinical Applications. The first section (excluding the initial chapter that provides a brief discussion of the history of clinical psychology, the nature of graduate training, and professional matters) presents a fairly comprehensive, basic introduction to the principles of clinical psychological diagnosis, psychometric

methods, and projective techniques. Particular emphasis is given to the Wechsler adult scales, the Rorschach, and the MMPI; consideration is given to most of the central theoretical and research issues relevant to these techniques with excellent and extensive chapter bibliographies.

The second section, Clinical Applications, is divided according to the major, traditional psychodynamic and psychiatric nosological categories, each chapter organized around a series of referral problems likely to be encountered in the medical setting. The virtue of this approach is its emphasis on the fact that, at least in the sophisticated psychiatric institution, the psychologist will be asked to consult on the difficult problem cases rather than on those that represent clear-cut or classic examples of a syndrome, and the authors illustrate how the psychologist and his techniques contribute to the understanding and care of the patient. This section contains extensive verbatim excerpts from the Rorschach, Thematic Apperception, and Wechsler tests and from the psychologist's interpretive report. Unlike the introductory overviews of the first section, these chapters will be read with most profit by those who have had clinical testing experience. These readers will find a number of provocative suggestions regarding differential diagnosis and Rorschach interpretation. The less knowledgeable reader may occasionally be at a loss to understand how the finer interpretive conclusions follow from the test excerpts, but the basic issues are spelled out clearly. The final chapter deals with medical-legal problems and the psychologist's role in this field at the present time.

TAKING the 15-word title of this volume as a statement of the authors' aspirations and arbitrarily giving each word a unit weight, it may be said that the authors have achieved over 60% of their goal. The first nine words up to the first comma are a reasonably accurate description of what this book is about (if one is willing to allow the almost total absence of child and pediatric applications); the tenth word, "Law," refers to the final chapter that

is relatively limited in contrast to the consideration of medical applications; and as for educational, nursing, and social work applications, it is not that the authors are less adept in their discussion of these but, rather, that they do not discuss them at all.

The ambiguity in purpose is evident in other ways. The initial chapter on clinical psychology has no essential relationship to the rest of the book, though it would be effective as an introductory presentation in a medical context. Its presence, given the broad title of the book, invites criticism regarding the lack of adequate presentation both of many current developments in clinical psychology in other settings and of alternative concepts of diagnosis implied by learning, educational, and behavior approaches.

Again, the detailed presentation of the MMPI as a prime example of psychometric method in personality assessment raises the expectation that we will see this instrument used, in conjunction with other techniques, in the second section of the book. The expectation is disappointed as the MMPI does not reappear. The bulk of the test material in the case presentations is restricted to a standard battery of the Wechsler, the Rorschach, and the TAT with some briefer references to Bender-Gestalt, Wechsler-Memory, and Eisenson Aphasia techniques in the chapter on Central Nervous System Impairment. While this may reflect the frequency of use of these tests in clinical practice today, it understates the variety of tests of specific functions that are available and used by many practitioners, particularly by child clinical psychologists with an educational orientation.

Within the traditional psychoanalytic framework of diagnostic testing, this book has much to offer. It is well written and the authors clearly have a broad knowledge of psychometric and psychodynamic theory, of the research literature, and are, themselves, highly sophisticated clinicians. Within its true field it is a good text.



Human Biology in the Classroom

Scientific American (Readings from, with an introduction by W. S. Laughlin and R. H. Osborne)

Human Variations and Origins: An Introduction to Human Biology and Evolution. San Francisco: Freeman, 1968. Pp. 297. \$10.00 cloth; \$4.95 paper.

Reviewed by FRANCIS E. JOHNSTON

The first editor, W. S. Laughlin, is Professor of Anthropology at the University of Wisconsin, while his colleague, R. H. Osborne, is Professor of Anthropology and Medical Genetics at the same institution. Both are teachers and researchers and both typify the new trend in physical anthropology.

The reviewer, Francis E. Johnston, is Associate Professor of Anthropology at the University of Texas at Austin. He formerly taught at the University of Pennsylvania. His research in teaching interests are in human genetics, human growth, and human adaptation. He is especially interested in the micro-evolution of human populations. He has done fieldwork in Mexico, Peru, and Guatemala.

As the scope and role of the introductory course in physical anthropology have broadened, so has the need for comprehensive texts. Faced with the difficult, if not impossible task of writing a single book in such a diverse field, publishers have turned to collections of articles, usually already in print, selected ideally to provide an overview of the discipline. The pages of the *Scientific American* seem a natural source for such treatment and, in fact, their offprint series has been used in bio-anthropological courses for years. It is not therefore surprising that W. S.

Laughlin and R. H. Osborne who, at the University of Wisconsin, have devised one of the few curricula in human biology to be found in an American university, have assembled a collection of articles from this noteworthy monthly. In true *Scientific American* style, the articles are written by authorities in non-technical language for a broad audience, with generally superb illustrations, though some of the half-tones were far better on the original glossy paper.

The editors have arranged the articles into four categories: Processes and History, Intraindividual Variation, Intrapopulation Variation and Interpopulation Variation. This taxonomic exercise provides some surprises; for example, both Crow's "Ionizing Radiation and Evolution" and Montagna's "The Skin" are involved with differences among major zoological taxa, but the former is to be found under Intrapopulation Variation and the latter Intraindividual Variation. Perhaps, however, we should not criticize so much as sympathize with the editors in their attempts to group diverse review articles into so few sections.

THE BREADTH of the selections is excellent, covering the major aspects of human biology from the level of the

molecule to that of the population. However, the restriction to a single periodical binds the editors to its coverage, whether good or bad, and the sometime spotty results testify to a certain unevenness in the *Scientific American*. Current scientific favorites are well-represented and articles such as Crick's "The Genetic Code" and Bassett's "Electrical Effects in Bone" are excellent. Selections dealing with human adaptation are likewise first-rate, for example, Napier's "The Evolution of the Hand," "Irving's "Adaptations to Cold" and Allison's "Sickle Cells and Evolution." The latter, though now 12 years old and somewhat out-of-date, still retains a sense of immediacy and importance that is enhanced by lucid writing. On the other hand, Gray's anecdotal piece "Human Growth" does very little for the subject, revealing its neglect by the *Scientific American* over the years. The restriction of choice to one source forces the editors to rely for the important australopithecine evolutionary phase upon Washburn's "Tools and Human Evolution," an important review in 1960 but now dated in this rapidly-changing area. Likewise, it is distressing, in these times of greater bio-physical technology, to see a full-page color illustration of the von Luschan skin color plaques (page 215). Certainly, photometric methods of assessing the degree of melanization have replaced the techniques of 40 years ago.

The editors introduce each set of selections with commentaries of several pages that bring together the ideas to be presented, introduce more recent material, and suggest additional readings. They are generally very good and help to unify and update the articles to a greater degree than one finds in most collections.

All articles in this volume are not of equal value and, given the same selective task as the editors, my choices would not have been identical to theirs, though they would certainly have been similar. Nonetheless, of all current books of collected readings, this stands as the best, reflecting the excellence of the *Scientific American* through the years and the wisdom of the editors in assembling an inclusive and extensive group of articles.

Perhaps the most important aspect of this volume is its orientation around a central theme, "human biology," that seems to be the wave of the future and the successor of Washburn's "new physical anthropology." The latter concept moved physical anthropology from the typological and dilettante approaches to more methodologically sound and experimentally oriented tactics. The theme of Laughlin and Osborne's selections, in the context of the beginning course in physical anthropology, is that this discipline (or even human biology) is more than ever identified with the biological sciences. The techniques and concepts of the biologist and colleagues in physical and medical sciences are those of today's physical anthropologist. This does not de-emphasize the importance of culture, but rather brings it into a more meaningful framework as an adaptive mechanism of truly biological significance. The students who use this book will not only read a good collection of articles, they will come away from the experience with as sound a concept of the directions of physical anthropology as could have been obtained from many a theoretical seminar on the subject.

Ego-Involvement in Attitude Research

Carolyn Sherif and Muzafer Sherif
(Eds.)

Attitude, Ego-Involvement and Change. New York: Wiley, 1967.
Pp. x + 316. \$9.75.

Reviewed by HERBERT J. GREENWALD

Since 1965 Carolyn Sherif, the first author, has been Associate Professor of Psychology at Pennsylvania State University together with her husband, Muzafer Sherif, the second author, who is Professor of Sociology and Director

of the Psychological Studies Program there. Previously they were at the University of Oklahoma's Institute of Group Relations. They have collaborated on four other books, the latest of which is *Attitude and Attitude Change: The Social Judgment-Involvement Approach* (with Nebergall). Muzafer has also co-authored several other books including (with Hovland) *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change*. He is author of *The Psychology of Social Change*.

The reviewer, Herbert J. Greenwald, took his PhD with McGuire at Columbia in 1964. He did post-doctoral work with Brehm at Duke University and is now at Boston University. He is interested in the problems surrounding the relationship of importance, commitment, and ego-involvement to attitude change.

It is possible to accept this symposium at one level yet find oneself debating it at another. At the first level are the research reports, a number of which are quite interesting. There are 13 of these, that range from a factor-analytically developed attitude model (Triandis) and inferences about mass media (Klapper) to analyses of attitude research (Weick; Hartley.)

At the second level are the participants' views, which are quite controversial. Perhaps the major underlying issue is their conceptualization of attitude into three components: affect, cognition, and predisposition to respond. This goes beyond combining the traditional Thurstone (1931) and Allport (1935) definitions (affect for or against a psychological object, and readiness to respond, respectively). Rather, each of the three components is required in order to measure attitude.

This trifold approach is illustrated in a test by Triandis of the relationship of "attitude" to overt behavior. He found overt behavior to be related to affect (5%), cognition (19%), and subjects' behavior-probability statements (11%). One possibility here, however, is that affect may be related to overt behavior through interaction rather than main effect. Another is that the particular measures of cognition and behavior-

probability might have tapped other aspects of affect, such as attitude intensity and degree of ambivalence. This study indicates, however, how empirical information can be obtained in this ambiguous area.

A second basic issue among many of the symposium participants is their preference for use of subjects' latitudes of acceptance and rejection. The latter are the range of positions along an attitude continuum that a subject finds acceptable or unacceptable. The major finding thus far is that the greater the region between the two latitudes (the subjects' latitude of non-commitment) the more persuadable he is. These latitude measures may be limited to certain types of polarized scales, however, and commitment can be measured by other methods. The special significance of these measures still seems largely undetermined.

THE unresolved "discrepancy-involvement" controversy provides a third basic issue. Does a person change his attitude when faced with a sizably different viewpoint? The participants tend to favor Sherif & Hovland's (1961) social judgment-involvement theory: an extremely discrepant attitude should be rejected, especially when the person is ego-involved. (Picture an extremist listening to an opposite extremist.) The other side of the coin is the expectation of dissonance theory (Festinger, 1957): a person should change toward an extremely discrepant viewpoint, especially when the situation is important to him. (Picture an anti-war youth fighting in Vietnam, listening to General Westmoreland.)

Sherif and also Whittaker argue that persuasion cannot occur when the opposing person is not an expert and the situation is structured and familiar.

But perhaps each theory refers to a different set of circumstances. For example, ego-involvement is treated as the reciprocal of non-commitment in social judgment theory, while importance is the consequence of a decision in dissonance theory. Or perhaps social judgment theory relates to cognitively polarized issues (e.g., Democrat versus Republican), while dissonance theory is

more suited to non-polarized phenomena (e.g., magnitude measures).

This and other issues cannot be resolved in the book since the relevant variables have not been tested in a single experiment. Paraphrasing Whitaker's metaphor, it is like trying to resolve the attitude "elephant" by its parts. Thus the book would have benefited by including representatives of other philosophies, for example, the Lewinian emphases on interacting variables and central theory.

The problems that cropped up were also interesting. For example, it appears that *post factum* correlations are still accepted by a few as evidence of cause and effect. The technical term "dissonance," referring to decision inconsistency, was sometimes incorrectly substituted for "conflict" (e.g., "Dissonance between field and experimental findings," p. 77). One contributor accepted anecdotal evidence that dissonant information is avoided. This is contrary to experimental evidence (e.g., Freedman & Sears, 1965). Another suggested that "... dissonance theory makes no allowances for individual differences ..." (p. 223), though situational variables automatically imply variations in individual response. (It may be significant, however, that individual-difference measures of dissonance have not yet been developed.) Also, research since the symposium (Barber & Silver, in press) suggests less potency for experimenter bias than that accorded it by the contributors.

The book has the ability to make the reader choose sides. It is a good bet that the reader will find himself more ego-involved in these issues than he expected.



The smaller the pebble in the shoe, the more it could hurt.

—WILLI HEINRICH



Media, Creativity, and Instruction

Calvin W. Taylor and Frank E. Williams (Eds.)

Instructional Media and Creativity: The Proceedings of the Sixth Utah Creativity Research Conference. New York: Wiley, 1966. Pp. xxii + 397. \$8.95 cloth, \$.95 paper.

Reviewed by C. R. CARPENTER

The first editor, Calvin W. Taylor, received his PhD under Thurstone at the University of Chicago. He is now Professor of Psychology at the University of Utah and has had a long and sustained interest in research in creativity, and has written widely in this field. Most recent books are Widening Horizons in Creativity and Creativity: Progress and Potential. The second editor, Frank E. Williams, received an EdD from Stanford and a PhD from the University of Utah under Calvin Hall. He also has made important contributions to the literature on creativity in education. He served as the Assistant Director of the Utah Creativity Workshops in 1963, 1964, and 1965. He is currently Professor of Psychology at Macalester College where he is conducting a series of seminars on productive thinking.

The author, C. R. Carpenter, received his PhD under C. P. Stone at Stanford and held a National Science Foundation Fellowship with Robert Yerkes at Yale. He is now Research Professor in Psychology and Anthropology at Pennsylvania State University and Consultant to the President, University of Georgia. He directed the Instructional Film Research Program under the auspices of the Office of Naval Research at Penn State from 1948-56; then his efforts shifted to applying psychological knowledge and learning theories to improvement and development of university-level instruction; this led to interests in planning universities in Florida, Pennsylvania, and Georgia. He has also con-

tinued to be active in the field of primatology.

THE VOLUME, *Instructional Media and Creativity*, is a solid, complex book that reports in a new form the intensive and extensive discussions of the Sixth Utah Creativity Research Conference. The explanations, arguments, expositions, and reports are given thematic continuity by a preface describing the background and purposes of the symposium and by an introduction that lists the group of people who "gathered for four days at Monterey Pines Inn at La Jolla, California. Of all the plethora of learned seminars and symposia that are being held these years, usually in attractive expensive places, surely none has been more comprehensively reported than this symposium. Purposes, people, and good discussion that were totally recorded, heavily edited, and rewritten or transformed into the language of print from the language of speech, compose the provocative book.

The procedure was to select first a small group of competent people with good backgrounds in research on creativity, media, and instruction with reference to "... our primary and secondary schools in America." The second purpose, in plain rather than governmental project proposal language, was to get suggestions for using instructional media for stimulating creativity in classrooms. A third purpose was to review the literature on creativity and on instructional media for what it has to say about designing, producing, and using them for creative ends. The two additional purposes were to define promising areas of research and to publish a report.

The achievement of these many purposes was critically dependent on the selection of the right people put into proper combination for productive discussions. Taylor and Williams selected from the area of creativity research some of the best-known psychologists and other scholars with related interests: J. P. Guilford, Donald W. MacKinnon, and Carl R. Rogers were there. Kenneth R. Beittel, Marie M. Hughes, Ross L. Mooney, Sidney J. Parnes, Malcolm M. Provus, Calvin W. Taylor, E. Paul

Torrance, and Frank E. Williams represented a wide array of experience and research in the area of creativity. Lester F. Beck, Jack V. Edling, and James D. Finn were the three excellent selections to represent creative media and developments.

THOSE of us who know these people could have predicted what the book so clearly shows; namely, that the discussions would be intense and of a high level of abstraction and of general significance, that their scholarly discussions would emphasize advanced theory of personality, ability characteristics, communication processes, instruction (teaching and learning), and creativity. The focused and well-regulated, or transformed and eclectic discussions learnedly scanned the broad fields of child psychology and how various abilities, including creativity, can be encouraged, stimulated, and developed. Theories of the components of intelligence and the relations of these to creativity were explored. Media research and communications theory were considered at a high level of generality.

Taylor's introductory chapters are focused on the challenging issue of how creativity can be aroused, encouraged, and developed by using the 'new' media. Edling sharpens the focus of thought by leading his discussion on using media creatively. Torrance conducts an interesting discussion on the implications of creativity research for instructional media design, production, and use. Beck centers his discussion on the media of films and television for providing the conditions for creative teaching. Beittel reports on his extensive and sensitively conducted research with the media used to stimulate creative behavior of students in art education. A fitting and wide-ranging concluding chapter provides a summary of the four days, and surely evenings also, of explorative thinking and talking. The book is climaxed by the listing of one hundred and twelve succinctly stated ideas that might be suggestive for media producers and teachers. Here nuggets of gold are to be found by the diligent researcher. Simply stated in linear language Williams defined the following issues:

1. How can media be used to 'teach' or encourage and develop creative behavior?
2. How can media that are used for instructional purposes be designed to incorporate research results on creativity?
3. What design or theory of instruction can encompass components of media and of conditions that lead to creative thinking and actions?
4. What research of significance to the theme of the symposium has been done and with what results?
5. What problem areas and hypotheses currently challenge investigation and promise useful practical results?

Instructional Media and Creativity is an important and scholarly book that should raise the prestige of the areas of research and development in both media and creative thought and behavior.

For the Child Buyers

Yvonne Brackbill and George G. Thompson (Eds.)

Behavior in Infancy and Early Childhood: A Book of Readings. New York: Free Press, 1967. Pp. xxi + 692. \$9.95.

Judy F. Rosenblith and Wesley Allinsmith (Eds.)

The Causes of Behavior II: Readings in Child Development and Educational Psychology. 2nd Ed. Boston: Allyn & Bacon, 1966. Pp. xv + 608. \$6.95.

Reviewed by ROBERT B. CAIRNS

The first editor of the first book, Yvonne Brackbill (PhD, Stanford), is

Professor of Psychology at the University of Denver. Her co-editor, George G. Thompson (PhD, Iowa), is Professor of Psychology at Ohio State University. The first editor of the second book, Judy F. Rosenblith, is Associate Professor at Wheaton College. Her PhD is from Radcliffe. Wesley Allinsmith is Professor and Head of the Department of Psychology at the University of Cincinnati.

The reviewer, Robert B. Cairns, is Associate Professor of Psychology at Indiana University. His PhD is from Stanford and he was on the faculty of the University of Pennsylvania before going to Indiana. His work is concerned with the social and motivational development of children and "other animals."

ONE of the more curious features of the literature in child psychology as it has evolved over the past thirty years has been its detachment from a parallel literature on the ontogeny of animals. "Detachment" in that the two approaches have developed more or less independently of each other, with only few instances of reciprocal stimulation. So these days it is still newsworthy when a single volume looks as if it could be useful in both comparative and child courses. Remarkably, it doesn't appear that Brackbill and Thompson were appealing for this sort of convergence when they assembled their collection of readings, *Behavior in Infancy and Early Childhood*. If such had been their aim, the editors might have selected at least one study of infra-human infant behavior.

Nevertheless, what they have included is surely important enough. The book contains an impressive array of studies of young humans, as this species has been studied under laboratory and semi-naturalistic conditions. The strong emphasis given to investigations of biological control mechanisms in infancy will be welcomed by those who consider organismic events to be crucial in behavioral and motivational development.

The editors were not parochial in their selections. Several articles were translated into English especially for this volume, including four significant papers on infant conditioning and perception from the Soviet literature. In

addition, Papoušek reports on his procedures of conditioning head movements in infants. The editorial comments are lucid. And a good thing, too, since few undergraduates in child or comparative would be able to follow, say, Ellingson's discussion of evoked potentials without some pre-digestion.

The materials in the last third of the book, mainly on the development of personality and social behavior, are less prepossessing. The problem was not what the editors selected but what they had to select from. If nothing else, the papers demonstrate the unhappy discontinuity that persists between theoretical statements on personality development and the meager systematic data that are available. Perhaps this area, more than any other, stands to benefit from greater reciprocity between the two literatures of developmental.

THE VOLUME, *The Causes of Behavior II* is the revised edition of a collection of readings intended for use in "courses that combine the content of educational psychology with that of child and adolescent psychology or human development." Seem like a lot to cram into one course? Not too much, because of the overlap that obtains among the areas. Still, the 82 papers reprinted are diverse enough so that the book justifiably could be used in a general introductory course that focuses on the "social-science" profile of psychology.

Perhaps in response to CP's comment on the primary *Causes* (p. 246, 1963), *Causes II* devotes somewhat more space than did its predecessor to the problems of classroom learning. But the orientation is still basically psychological rather than educational, theoretical rather than applied. Thirty-seven per cent of the papers in the first edition have been replaced. Included in the new offering is one original report: a useful summary by White and Held on their studies of infant perceptual development. There is still considerable unevenness in the editorial comments. One problem is that more attention is given to who the authors are than to what they did, and why. This shortcoming is a minor one, since most of the papers are themselves clearly written.

Both the Brackbill & Thompson and the Rosenblith & Allinsmith volumes are likely to see heavy service in the rather separate roles for which they were prepared. Such would be deserved, since both editorial teams maintained over-all a reasonably good balance in their selections. *Behavior in Infancy and Childhood* is also check-rated for those interested in comparative analyses of behavior development.

Swedish Praise

Ingvar Johannesson

Effects of Praise and Blame: Results of the Class Teacher's Incentives Upon Achievement and Attitudes of School Children. Stockholm: Almqvist & Wiksell, 1967. Pp. 82. Sw. Kr. 20.—

Reviewed by PAULINE S. SEARS

The author, Ingvar Johannesson, is identified by the reviewer, Pauline Sears. She is Professor in the School of Education at Stanford University. Her PhD is from Yale. She is deeply engaged in research in child development with particular concern for cognitive development as it is affected by teacher-child interaction.

WITH typical Swedish thoroughness, Ingvar Johannesson of the Department of Education and Psychological Research at the School of Education in Stockholm, has taken an old problem—effects of praise and blame—and researched it most elegantly.

Forty-one classes of fourth graders, totaling 900 children, made up the sample. Each had five test sessions of mathematical tasks, one part in each session "mechanical" (computation) and one part of "intellectually demanding"

problems increasing in difficulty. Experimental treatments consisted of: 1) praise preceding the four last sessions, 2) praise through the first three of these, blame before the last, 3) blame throughout all sessions, 4) blame with praise before the last. A control group performed the tasks with no praise or blame by the teacher.

In addition to scores on performance and errors, the data include pre- and post-measures of self-assessment of performance, anxiety, and attitudes toward the teacher. Low and high mathematics achievement groups were looked at separately.

Results: Praise wins! Especially it is more effective, as predicted, with anxious and low-achieving children, and for children who have only a low appreciation of the teacher. Praise or blame did not alter the children's appreciation of the teacher from pre- to post-test, however. Once you get an appreciation of the teacher no measly five sessions of praise or blame are going to alter it, apparently. No changes were found in anxiety level either.

Blame is bad for performance, especially for the same kinds of pupils praise is good for. Both sets of results appeared only on the mechanical type of tasks, not on the problem-solving tasks of more complex type. This interesting finding is in confirmation of an early hypothesis of Thorndike's with reference to motivational effects on speed of performance in simple routine tasks as compared to those more complex. Work at Stanford has shown that computerized drill work on computational material, with immediate feedback, is effective in improving computation skills.

Errors were predicted to decline with blame and increase slightly with praise; this did not work out since the number of errors was small in all incentive groups. Swedish children are good in math; however, they are human: the control group, without feedback, increased in errors from first to last session.

There is a comprehensive summary of the literature from 1916 to date. Teachers could well profit from exposure to this small but solid monograph.

Micro-Parade of Paperbacks

By JOYCE HOFFMAN

PAPERBACK psychological publication may be entering a new stage of evolution. This process is characterized by two main features; (1) the good old nuggets have gotten close to being mined out. The day when each new package contained half a dozen of the solid old bedrocks is gone. (2) The time lapse between the hardback and softshell edition of a work grows less and less. Thus the paperback review, which only lists softshellers appearing within five years of their hardback parent, becomes more list and less review. The present lot is a dead heat—seven listings, seven reviews. Quite a far cry from the halcyon days when Calvin Hall and Ed Murray had perhaps a hundred books. Or, even, from the eighty per year in the earlier years of this reviewer's tenure on this task.

If the present trend continues, it suggests that perhaps softshell should be reported but once a year. Or go to aperiodic presentation when a sizable batch has accumulated. Or something.

Anyway, here's what we have at the moment, including a couple of entrants from Social Science Paperbacks, the new softshell child of Associated Book Publishers, Ltd., London, whose works will be purveyed in this country through Barnes and Noble, and whose preliminary list of titles looks good for our field.

AXLINE, VIRGINIA. *Dibs in Search of Self*. Ballantine, 1967. Pp. 220. \$.75. Reprint (Original 1964).

BARRON, FRANK. *Creativity and Personal Freedom*. Van Nostrand, 1968.

Pp. 322. \$3.95. Reprint (Original, of which this is a revision, was published as *Creativity and Psychological Health* in 1963).

BOTTOMORE, T. B. *Classes in Modern Society*. Vintage, 1968. Pp. 120. \$1.45. Reprint (Original 1966).

BOWLBY, JOHN ET AL. *Maternal Care and Mental Health. and Deprivation of Maternal Care*. Schocken, 1966. Pp. 357. \$2.45. Reprint (Original 1951).

This two-in-one volume brings back both the findings on maternal deprivation in the 1951 WHO report by Bowlby, and the series of papers by Ainsworth, Andry, Harlow and Prugh, Labovici, Mead, and Wootton that assess, criticize, evaluate, and lay ground for further research on the problem. A hard look is taken at the definition of maternal deprivation, at the consequences of deprivation upon children in different age groups, at possible substitute arrangements, at long-range effects of deprivation, and at possible theoretical guidelines to understanding how to study the maternally deprived child, and how to prevent depriving circumstances. A very useful book with a good review, up to its date, of the literature on this subject.

FINN, JAMES. *Protest: Pacifism and Politics*. Vintage, 1968. Pp. 528. \$2.45. Reprint (Original 1967).

FRANK, JEROME. *Sanity and Survival: Psychological Aspects of War and*

Peace. Vintage, 1968. Pp. 330. \$1.95. Reprint (Original 1967).

HERBST, P. G. *Autonomous Group Functioning*. Social Science Paperbacks, 1968. Pp. 271. \$3.25. Reprint (Original 1962).

Here is the single-case approach to the study of a task group maximized. Herbst studies a coal-mining group that determines, develops, and then does a mining procedure, while Herbst observes and measures. From this intensive study is generated a conceptual model of the function of such a group, and a mathematical model of interlocked equations pulled into a multivariate analysis to deal with such variables as interaction rates and patterns, work output, worker satisfaction, absenteeism, job stress, group and work cohesion and disruption, internal and external task strain, etc. Students of groups can find here a useful plan of operation for the study of groups, and a tested rationale for the single case approach.

HUEY, EDMUND B. *The Psychology and Pedagogy of Reading*. M.I.T. Press, 1968. Pp. 469. \$3.95. Reprint (Original 1908).

Sixty years have passed since Huey wrote this book. Yet, save for some of the material on teaching method, the book is not old. Huey then was grappling with some of the problems in cognitive study on which a great deal of energy is being invested now. What does go on between the apprehension of the word on the page and the transformations to which it is subjected in the mind of the reader? Huey offers his own thoughts on this matter, and in many instances they could be the thoughts of today. Huey had a hand on information theory in '08 which still looks good in '68. M.I.T. Press has done us a favor, historically and substantively, in republishing this old, contemporary book.

ISAACS, SUSAN. *Intellectual Growth in Young Children*. Schocken, 1966. Pp. 295. \$2.45. Reprint (Original 1930).

Here is a lively report of a good school where children learn by exploration.

Journals of the AMERICAN PSYCHOLOGICAL ASSOCIATION

Subscription Rates for 1968

American Psychologist. Official papers of the Association and articles on psychology. Monthly. The 1968 volume is Vol. 23. Subscription: \$10.00 (foreign \$10.50). Single copy \$1.00.

Contemporary Psychology. Critical reviews of books, films, and research material in the field of psychology. Monthly. The 1968 volume is Vol. 13. Subscription: \$10.00 (foreign \$10.50). Single copy \$1.00.

Journal of Abnormal Psychology. Theoretical and research contributions in behavior pathology. Bimonthly; first issue appears in February. The 1968 volume is Vol. 73. Subscription: \$10.00 (foreign \$10.50). Single copy \$2.00. (Continues volume sequence of the former Journal of Abnormal and Social Psychology.)

Journal of Applied Psychology. Applications of psychology in business and industry. Bimonthly; first issue appears in February. In addition to the regular journal issues it is expected that subscribers will receive two Monograph supplements annually. The 1968 volume is Vol. 52. Subscription: \$10.00 (foreign \$10.50). Single copy \$2.00.

Journal of Comparative and Physiological Psychology. Original contributions in the field of comparative and physiological psychology. Bimonthly; first issue appears in February. Two volumes per year, three issues in each volume. In addition to the regular journal issues it is expected that subscribers will receive two Monograph supplements annually. The 1968 volumes are Vols. 65 and 66. Subscription: \$20.00 for 2 vols. (foreign \$20.50). Single copy \$4.00.

Journal of Counseling Psychology. A primary publication medium for research in counseling theory and practice. Bimonthly; first issue appears in January. The 1968 volume is Vol. 15. Subscription: \$10.00 (foreign \$10.50). Single copy \$2.00. (Vols. 1-13 published by Journal of Counseling Psychology, Inc.)

Journal of Consulting and Clinical Psychology. Research in clinical psychology, psychological diagnoses, psychotherapy, personality, psychopathology. Bimonthly; first issue appears in February. In addition to the regular journal issues it is expected that subscribers will receive two Monograph supplements annually. The 1968 volume is Vol. 32. Subscription: \$10.00 (foreign \$10.50). Single copy \$2.00.

Journal of Educational Psychology. Studies of learning and teaching, measurement of psychological development, psychology of school subjects, methods of instruction, school adjustment. Bimonthly; first issue appears in February. The 1968 volume is Vol. 59. Subscription: \$10.00 (foreign \$10.50). Single copy \$2.00.

Journal of Experimental Psychology. Original contributions of an experimental character. Monthly. Three volumes per year, four issues in each volume. In addition it is expected that subscribers will receive approximately six Monograph supplements annually. The 1968 volumes are Vols. 76, 77, and 78. Subscription: \$30.00 for 3 vols. (foreign \$30.50). Single copy \$3.00.

Journal of Personality and Social Psychology. Theoretical and research papers on personality dynamics, group process, and the psychological aspects of social structure. Monthly. Three volumes per year, four issues in each volume. In addition it is expected that subscribers will receive approximately six Monograph supplements annually. The 1968 volumes are Vols. 8, 9 and 10. Subscription: \$30.00 for 3 vols. (foreign \$30.50). Single copy \$3.00.

Psychological Abstracts. Noncritical abstracts of the world's literature in psychology and related subjects. Monthly. Approximately 17,000 abstracts published annually. The 1968 volume is Vol. 42. Subscription: \$40.00 (foreign \$40.50). Single copy \$3.00.

Psychological Bulletin. Evaluative reviews of research literature, discussions of research methodology in psychology. Monthly. Two volumes per year, six issues in each volume. The 1968 volumes are Vols. 69 and 70. Subscription: \$20.00 for 2 vols. (foreign \$20.50). Single copy \$2.00.

Psychological Review. Original contributions of a theoretical nature. Bimonthly; first issue appears in January. The 1968 is Vol. 75. Subscription: \$10.00 (foreign \$10.50). Single copy \$2.00.

(Psychological Monographs. Discontinued as a separate subscription. Monographs distributed as supplements to appropriate subject area journal.)

Cover page, table of contents, and index are contained in the last issue of the volume for each journal.

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tion and find learning enlivening rather than deadening. The surprise is that it reports from forty years ago. It tells of the work done at the Malting House School, Cambridge, England with twenty children three to ten years old, whose mean IQ was 131. The report covers three main areas: (1) the actual things done and said by the children themselves, (2) the way in which the staff was oriented in working with the children, and (3) the findings of Dr. Isaacs concerning how children think, and how best to help the development of this thinking. There are, in addition, some well-thought-out comments on Piaget, whose work was well-known to Dr. Isaacs. A wonderful view of a kid's world of discovery and his cognitive unfolding!

KRICH, ARON (Ed.). *The Sexual Revolution*. Dell, 1967. Pp. 352. \$.95. Reprint (Original 1963).

RAPOPORT, ROBERT. *Community as Doctor*. Social Science Paperbacks, 1967. Pp. 325. \$4.25. Reprint (Original 1960).

This is a research 'second look' at the rehabilitation program previously described by Maxwell Jones, its director, in *The Therapeutic Community*. The essential structure and ideology of the unit is as it was from the start. Now sufficient time has elapsed for Rapoport and his team to present an evaluation of this total therapeutic milieu and it is, generally, an encouraging one. Two hard problems that beset the unit are (1) the matter of more substantial work in after-care centers in the first, critical months when a member is 'out' and (2) the problem that treatment and rehabilitation goals are sometimes at cross-purpose. An interesting re-visit to one of the 'firsts' of milieu therapy.

RUESCH, JURGEN and GREGORY BATESON. *Communication: The Social Matrix of Psychiatry*. Norton, 1968. Pp. 314. \$2.65. Reprint (Original 1951).

Today it is nearly impossible to avoid the concept, communication. The whole study of human interaction is, in a most important sense, the study of com-

munication as it has shaped the interacting persons and the nature and substance of their relating. Someone has chidingly suggested that psychologists have sold their birthright for a pot of message. Ruesch and Bateson were among the first to attempt a coherent theory of social communication, suggesting that they probably were among the first to realize that the psychologist who ignores the nature of human message formulation and transmission may have missed the message—indeed, the boat, in his profession. 'Welcome Back.'

SAMPSON, RONALD. *The Psychology of Power*. Vintage, 1968. Pp. 247. \$1.95. Reprint (Original 1965).

VALENTINE, C. W. *The Experimental Psychology of Beauty*. Social Science Paperbacks, 1966. Pp. 433. \$4.25. Reprint (Original 1962).

Valentine has pulled together in this book a large and varied body of research on what beauty means to people and how they arrive at their evaluation of a poem, a painting, a musical composition, as beautiful to them. To the old question about the locus of beauty, i.e., whether it lies in the object perceived or the eye of the perceiver, the evidence collected here would certainly affirm the latter. The studies presented give evidence of some of the interesting and often idiosyncratic attributes of the experience of beauty as subjects identify and describe it. This work is most interesting and Valentine has performed yeoman service, both in his own studies, and in putting together into one source all the material cited here.

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Between the full consciousness and the Cartesian mechanism there is room for beings with sensation without awareness, without a me capable of perceiving it.

—MAINE DE BIRAN

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To Be Psychology or Not to Be, That is the Question

Donald L. Clark (Ed.)

The Psychology of Education: Current Issues and Research. New York: Free Press, 1967. Pp. xiv + 274. \$2.95.

Reviewed by GILBERT SAX

The editor, Donald L. Clark, received his PhD in clinical psychology at Adelphi University and interned in the VA Hospital, Palo Alto, California. In 1961 he went to Hunter College to work in the Education Department. He is now Director of the Educational Clinic on the Bronx Campus of Hunter. He is author with Lesser of *Emotional Disturbance and School Learning*. He is always on the lookout for new techniques that can be used to help teachers become more psychologically aware.

The reviewer, Gilbert Sax, is Professor of Educational Psychology at the University of Washington. His 1958 PhD is from University of Southern California. He formerly taught at the University of Hawaii where he was Chairman of the department. He is author of *Empirical Foundations of Educational Research*.

DONALD CLARK's *The Psychology of Education* is not a textbook in educational psychology. It is not intended to be nor could it adequately substitute for any of the currently available texts designed for teachers in training. It is not a technical, detailed, nor particularly rigorous treatment of any of the traditional topics encompassing educational psychology. Indeed, classical studies are deliberately omitted.

The Psychology of Education is more about education than psychology. The subtitle, *Current Issues and Research*, helps in defining the content of the readings but places an unwarranted emphasis on research. It does, however, admirably meet the author's intent to "agitate rather than contemplate," but

whether this is desirable or not is a moot point.

The readings in this text are current, the earliest dating back only to 1964, the majority having been published in 1965 and 1966. For those too busy to read anything other than technical research reports, Clark's book will find a welcome acceptance. Articles written by Riesman, Allport, Torrance, Bruner, Skinner, Keppel, and Bloom are designed to provide the reader with a glance at the current educational (if not psychological) scene. And the topics are timely. Who today is not concerned with the disadvantaged, creativity, emotional development, learning, reading, and teaching?

No text is perfect, and there are some limitations to Clark's. One looks in vain, for example, for criteria to judge why one article appears in the text and another is excluded. Why a chapter on intelligence but none on personality measurement? Why one on grouping but none on computer based instruction? Criteria for the selection of topics and articles would have been most welcome.

If readings are designed for those having some familiarity with the field as the author states he is, then one can only ponder his need to warn the reader that one rather simple article "is tougher sledding than most of the reading in this book." From this it appears that one criterion for inclusion of articles is simplicity. This speaks badly for the quality of the individual for whom the book is intended. This is not Clark's fault, but it does point out a difference between readings oriented towards psychology and those intended to be read by educators. It implies that teachers, administrators, and college students preparing for a professional role in education are not prepared for the rigor of readings that other fields take for granted. Most of the articles do, in fact, reflect the personal opinion or bias of their authors, and few contain empirical data or evidence, a distinction favoring (unfortunately) a psychology of education rather than an educational psychology.

Still, I must admit having enjoyed reading the articles in *The Psychology of Education* and learning what others

are thinking about in education if not in psychology. Donald Clark's readings will be of greatest value for those wishing an exciting overview of educational problems and how they are being met nationally. For those concerned with research, there is less to recommend.

Sensory Adaptations

Otto Lowenstein

The Senses. Baltimore: Penguin, 1966. Pp. 214. \$1.25.

Reviewed by JAMES C. CRAIG

The author, Otto Lowenstein, is Mason Professor of Zoology and Comparative Physiology, Birmingham University, England. He is best known for his numerous articles on the physiology of the vestibular sense. He is editor of Sensory Specialization in Response to Environmental Demands.

The reviewer, James C. Craig, received his PhD under Geldard at Princeton University. His main area of interest is in sensory psychology, especially the sensory functions of the skin, and attempting to relate these functions to those of the other senses. He is an Instructor, Department of Psychology, Princeton.

OUT of fruitless battles with one of man's smallest foes, there has emerged an inescapable conclusion: the housefly is quicker than the hand. For those of you who have pondered the 'why' of this state of affairs, the explanation is to be found, along with many other interesting facts, in this book by Lowenstein.

The book begins with a brief account of nerve physiology and ends with a description of sensory areas in the central nervous system and a discussion of the philosophy of sensation. In between are,

as the author himself terms them, "essays" on the individual sense channels. The senses are divided into three groups according to the kind of stimuli to which they are maximally sensitive: electromagnetic, mechanical, and chemical.

In addition to rather basic coverage of the anatomy and physiology of man's senses, the book presents an interesting kaleidoscope of sensory feats of lower animals: the pit viper that can 'see' infrared radiation in total darkness, the electric eel that receives information from the disturbance of its own electric field, the protozoan *Euglena* that can orient itself to a light source by means of its primitive photoreceptor, and many others. The rather loose organization within the chapters, however, produces for the reader another kaleidoscopic effect—slight vertigo as a result of having to skip pell mell from topic to topic.

THE AUTHOR makes good use of the entire range of animal life to illustrate two important principles from biology that are not often emphasized in books that deal with but a single animal. The first is the adaptive significance of particular physiological mechanisms, in this case the senses. For example, in a discussion of animal optics, the author points out how the relatively large lens in the eye of the mouse does not provide for good pattern discrimination but is well-suited for gathering light in such a nocturnal animal.

The second principle, related to the first, is the diverse ways in which animals have solved common problems—the general problem of gathering information about their environment and the particular problems connected with such information gathering. An interesting example of this principle, again taken from vision, is found in the compound eye of insects active both in the daytime and at night. Such animals, who must adapt to changing light conditions, have developed pigmented cells between the individual units of their eyes. These cells act like windowshades. In bright sunlight they can be drawn to screen off the individual units from one another and to absorb excess light energy; in dim light the pigmented cells can be withdrawn to allow the individual units to

pool the available light energy in order to improve sensitivity.

If for no other reason than to gain an appreciation of the importance of these principles, the book would be valuable as a supplementary reading in an undergraduate course in either sensory or comparative psychology. For other psychologists, the book serves as a highly readable reminder that man, with his enlarged cerebral cortex, opposing thumb, and use of language, has often been bettered in sensory matters by the dog, the rattlesnake, and even the housefly.

Roots of a Scientific Discipline

Robert E. Grinder

*A History of Genetic Psychology:
The First Science of Human Development.* New York: Wiley,
1967. Pp. xii + 247.

Reviewed by ARTHUR T. JERSILD

The author, Robert E. Grinder, received his EdD from Harvard University in 1960. He has taught at Boston University and at The University of Hawaii and is currently Associate Professor of Educational Psychology, University of Wisconsin. He is author of *Studies in Adolescence*, and of research articles in the area of human development and personality.

The reviewer, Arthur T. Jersild, is Professor Emeritus of Psychology and Education, Teachers College, Columbia, where he also earned his PhD and, except for brief periods at the University of Nebraska, Barnard College, and the University of Wisconsin has spent his long teaching career. He is author of numerous research articles and monographs in the field of child psychology and of *Child Psychology* (now in its 6th edition) and of *Psychology of Adolescence*. His Alma Mater, the University of Nebraska, awarded him an LLD in 1962.

THIS is a thoughtful and readable book dealing with the antecedents of genetic psychology up to the early part of the present century. The title will probably, for many readers, arouse expectations of a wider historical coverage than the author intended. It is necessary to read the Preface to discover that the author terminates his history at about the time of G. Stanley Hall.

The contents range through a reproduction of original writings from the history of science beginning with Aristotle and including Lamarck, Charles Darwin, Fritz Müller, Ernst Haeckel, Edward Drinker Cope, Herbert Spencer, Thomas Huxley, Henry Drummond, George Romanes, John Fiske, and G. Stanley Hall and his associates at Clark University. The book ends with a critique by Thorndike, in 1913, of Hall's theory of recapitulation. Excerpts from these writers are well chosen and are skillfully interwoven in a context of discussion by the author.

Much of the book deals with biological evolution within the race as distinguished from the development of psychological processes within the individual. Along the way, the reader meets the doctrines of special creation, pangenesis, and Lamarck's theory of the inheritance of acquired characters. Lamarck's work, reproduced in this volume at considerable length, "... enjoyed its brightest day when Darwin, in explaining hereditary variations during the evolution of species, admitted that acquired characters augmented natural selection" (p. 75).

GRINDER portrays Darwin's valiant efforts to account for the transmission of inherited characteristics without benefit of knowledge of Mendel's discoveries in genetics. It is also interesting to note that not only Darwin but several others cited by Grinder pursued their work unaware that Mendel, in a publication that remained obscure for many decades, had already provided the basis for an answer to one of the riddles they were seeking to solve. (I gather, from a biography of Mendel, that he published his first papers between 1860 and 1869. During this time, as shown

by marginal notes, he was familiar with Darwin's work, but Darwin apparently was not familiar with Mendel.)

While Grinder several times calls attention to Mendel, the references are rather brief. In my opinion, Mendel deserves more prominent mention than this in a history of genetic psychology. True enough, he worked with peas, but his hybrid peas are as pertinent in the history of genetic psychology as the plants and animals observed by other writers who are cited at some length. Apart from this, Grinder has made an illuminating selection of writings. A selection from Romanes (1884), dealing with mental evolution in animals and man, is especially timely in the light of contemporary interest in cognitive development.

The selection from G. Stanley Hall near the end of the book is noteworthy. Hall's name is often reverently invoked in accounts of the beginnings of genetic psychology in the United States. Grinder intimates, however, that Hall's reputation may be a bit inflated. At any rate, the chapter reproduced from *Adolescence*, while rich in rhetoric, is something less than a masterpiece.

Within the limits prescribed for himself Grinder has produced an enlightening account of the antecedents of a discipline that began to flourish notably in the late 1800's and has continued to thrive in the present century

Since every science has its own principles different from the principles of other sciences, the intellect longs and needs a general, universal science, which would contain and embrace all the principles of the other sciences, as the particular is contained in the universal.

—RAYMOND LULLY

A Hole in the Head

Doris J. Johnson and Helmer R. Myklebust

Learning Disabilities: Educational Principles and Practices. New York: Grune & Stratton, 1967. Pp. xii + 336. \$9.75.

Reviewed by HARVEY F. CLARIZIO

The authors, Doris J. Johnson and Helmer R. Myklebust, are connected with the Institute for Language Disorders, Northwestern University. Myklebust is also Professor of Language Pathology, School of Speech and Professor of Neurology and Psychiatry at the School of Medicine. He is author of numerous other books in the field.

The reviewer, Harvey F. Clarizio, is Assistant Professor of Educational Psychology, Michigan State University. His EdD is from the University of Illinois and he has taught at Illinois State University and worked as a school psychologist in Champaign, Illinois. He is co-author or co-editor of three forthcoming texts. He has also had experience working with emotionally disturbed and learning disordered children.

As the authors note in their preface, this volume is based on more than 15 years of research and practice in the area of learning disabilities at the Institute of Language Disorders. In addition to presenting a psychoneurological frame of reference, this book maps out the principles and practices that the authors have found helpful in working with youngsters with these disabilities. After noting inadequacies of the various and nebulous labels attached to these disorders, (neurophrenia, perceptually handicapped, minimal brain damage, etc.), the authors settle for the term psychoneurological learning disabilities, which they define as a difficulty in

learning in the presence of emotional, motor, sensory, and intellectual integrity. The term psychoneurological connotes a disorder in behavior that is caused by a neurological dysfunction in the central nervous system. It is clear from the outset that the authors are limiting themselves to one cause, and perhaps an infrequent one at that, of learning disabilities. Psychodynamic and/or instructional causal factors are not considered.

The inadequacies and unreliability of psychological and neurological assessment techniques, as well as the paucity of information relating impaired nerve centers to classroom learnings, will immediately arise in the minds of the readers when they see statements such as, "the findings of the neurologist, electroencephalographer, and ophthalmologist are of considerable value to the educator." Many educators will quickly question the need to introduce hypothetical constructs of a neurological nature. Certainly, this approach will alienate those less etiologically minded educators and psychologists who prefer to program remediation on the basis of behavior *per se*. It becomes apparent in reading the text that while numerous specific and valuable remedial exercises are delineated, very few of them appear to have been generated by psychoneurological theory. Hence, for those who are concerned more with the effects than with the causes, Chapter II on the Brain and Learning might easily

have been omitted without doing any sizable disservice to the discussion of remedial aspects.

The terminology associated with this psychoneurological approach also deserves comment. Though the authors intended the book for a wide educational audience, their inclusion of such terms as agnosia, apraxia, alexia, dyslexia, dysgraphia, intrasensory, intersensory, etc., will render it most unattractive to the narrow audience who work in medically-oriented settings. That such terms will be of value to public school teachers seems, indeed, questionable. Use of such terminology not only detracts from the readability and appeal of the book but dictates the need for careful guidance and translation on the instructor's part, especially when used at the undergraduate level.

THE major portion of the book is devoted to the role of classroom teaching as it pertains to the diagnosis and remediation of learning disorders involving language, reading, arithmetic, and nonverbal behavior. The most perceptible shortcoming of this portion of the text lies in its heavy emphasis on language disorders. Specifically, the two chapters on language disorders total more than half of the pages devoted to the consideration of specific disabilities. Without denying the interrelatedness of language disorders with other disabilities, it appears to the reviewer that the frequency and perhaps the importance of these disorders have been overestimated, at least as far as the public schools are concerned. At any rate, teachers typically express less concern over language disorders than they do over reading disabilities, which are covered in a 45-page chapter.

The chapter on arithmetic disability is rather sketchy. To an even greater degree, spelling difficulties do not receive nearly the careful consideration given impairments in other subject matter areas. Furthermore, those who place greater reliance on motor training are also apt to feel that this viewpoint has been given only a cursory examination when they note the relative space allotted the different topics.

In short, there is an uneven emphasis that detracts from the balance of this volume.

Two additional critical points merit brief notice. In the final chapter of the book, the authors speak of the need for more reliable diagnostic classification systems and for careful evaluation of treatment outcomes, but direct virtually no attention to the important topic of prevention. One gets the impression that these authors would be content to continue treating individual cases (hopefully with increasing efficiency) in the foreseeable future rather than attempting preventive interventions now. Secondly, although opponents of the clinical teaching approach would understandably be opposed to any process that routinizes, standardizes, or simplifies remedial instruction, it is disappointing to see no discussion of attempts to use nonprofessionals in that few if any schools or agencies have sufficient numbers of highly skilled remedial specialists.

On the positive side, these authors do a nice job of delineating the characteristics of various learning disabilities. This should prove valuable to prospective teachers. Even more important is the careful attention devoted to concrete remedial exercises that the clinical teacher can use. Herein lies the real strength and appeal of the text. The copious illustrations, 74 in all, convey quite effectively the various types of learning disabilities as well as appropriate remedial practices. No simple solutions are offered for severe disabilities. Rather, the authors realistically depict the complexities of these problems. It is also encouraging to note the flexibility of administrative provisions advocated. Mention of the need for evaluation of treatment outcome will be highly appreciated by those who want pedagogical techniques established on a more scientific basis. Altogether too frequently, clinicians are inclined to take their "successes" for granted.

In conclusion, despite the generally critical tone of this review, it should be noted that this book is perhaps the best single, up-to-date, introductory text available in the area of learning disabilities. As such, this book should make a definite contribution to what is per-

haps the most recently recognized area of special education. This text has something to offer both the theorist and the practitioner. It is a book that any serious student of learning disabilities should consider reading.

Imbalanced Sensory Psychology

Y. Zotterman (Ed.)

Sensory Mechanisms. (Progress in Brain Research, Vol. 23) London/New York: Elsevier, 1967. Pp. viii + 225. \$14.50.

Reviewed by ERNEST DZENDOLET

The editor, Y. Zotterman, is Professor of Psychology, Veterinary College, Stockholm, Sweden. He has published research on the neural mechanisms of the various cutaneous senses since 1933, and the gustatory sense since 1935. He is editor of Proceedings of the First International Symposium on Olfaction and Taste.

The reviewer, Ernest Dzendolet, is Associate Professor of Psychology at the University of Massachusetts. His PhD is from Brown University and since 1958 he has published on the electrophysiology of the frog retina, the vestibular-motor system of humans, and various gustatory topics, including a new theory of the property that causes organic and inorganic compounds to be reported as sweet.

THIS SERIES consists of 27 separate volumes whose topics have been "chosen with a view to illustrating all the important aspects of brain research and are dealt with exhaustively from a number of viewpoints." The volume being reviewed is based on seven lec-

tures presented in one of the workshops of the second International School of Brain Research held in Amsterdam, 1964. Three of the lectures are on the anatomy and physiology of the olfactory system, and comprise 63% of the volume. The remaining articles cover the neural mechanisms of gustation, the clinical examination of the vestibular system, a mathematical model of vestibular and hearing disorders, and the protopathic and epicritic sensations.

The reason for this choice of topics is not clear, although it is apparently true that the sensory input of lower animals is largely olfactory and gustatory. However, it has been estimated that 38% of man's sensory input is visual, and, therefore, also of importance in terms of the amount of information presented to the brain. Another important omission in the cutaneous system. It was this system, along with the gustatory, that provided data for a new look at the neo-Müllerian theory of quality signaling, that postulated a 'specificity' in receptor sensitivity and evoked quality. The evaluation led to a 'patterning' theory, in which receptors are assumed to be sensitive to all stimuli, and the evoked quality is determined by an analysis in the central nervous system of the neural firing pattern of the whole nerve, rather than whether a single neural fiber is active or not.

Because there are data to support both theories, it seems very important to have in-depth discussions of this dilemma. Clearly, a resolution of the problem would be an important step in the understanding of data processing by the brain in general. It should be pointed out that the role of lateral inhibition and summation at the periphery, as demonstrated so clearly by von Békésy, and feedback from higher centers to the periphery, are inseparable parts of the same problem. A volume with this topic as its central theme would have been better suited to this series.



BRFLY NTD

DEAN C. BARNLUND. *Interpersonal Communication: Survey and Studies*. Boston: Houghton-Mifflin, 1968. Pp. xi + 727.

Yet another anthology of readings in social psychology, thinly disguised by a title that sounds more restrictive than it turns out to be. Think about "interpersonal communication" for a moment. You will discover that this label can reasonably cover portions of such subfields as person perception, group ecology, interpersonal bargaining, and psychotherapy. Collect a few papers from each of these areas, add the standard list of papers in social psychology that have "communication" in the title, and you have a fairly comprehensive book of readings. But the editor of the present volume obviously knows his stuff and has been in touch with a substantial literature. The surveys with which he introduces each section, adding to 159 pages of text, are scholarly and informative. The interest he expresses by his taste in selected readings seems to lie more in constructs and perspectives for analysis than in cleverly designed research or studies that have solid, replicable findings. Perhaps this is the most interesting kind of book to teach from in trying to encompass a rather inchoate area.

EDWARD E. JONES

MOLLY BREARLEY and ELIZABETH HITCHFIELD. *A Guide to Reading Piaget*. New York: Schocken Books, 1966. Pp. xii + 171. \$4.50.

This volume attempts to introduce Piaget to teachers in a way that will show them the relevance of his work

and will induce further reading. Excerpts from Piaget's writings make up more than half of its pages; the remainder are devoted to explanatory comments and possible implications of the ideas for teaching. The majority of the chapters deal with problems relevant to the transition from preoperational to operational thought, though infancy and adolescence are also mentioned. The commentary is helpful as far as it goes, but is limited to the explication of individual series of experiments; a broader sketch of the outlines of the theory would have been useful. Excessive reliance on quotation presents another problem: the result seems about as difficult for the uninitiated reader as Hunt's summary in *Intelligence and Experience* would be.

WILLIAM C. WARD

JAMES L. BRUNING and B. L. KINTZ. *Computational Handbook of Statistics*. Glenview, Ill.: Scott, Foresman, 1968. Pp. 269. \$4.95.

Step by step by painful step, over 600 of them. Not a cookbook since recipes (formulas) are usually not given: the user will need to learn from other sources the why for doing an unexplained what. There are some unfortunate conceptual slips: the "treatment-by-levels design" is not what Lindquist (cited as source) subsumed under that rubric; a significant linear component does not mean that "data points tend to lie on a straight line"; high reliability does not mean that items are valid; the validity of a chi square does not presume *observed* frequencies exceed 5; there is an absolutely

goofy partial r on p. 163; one wonders about the source for the point-biserial formula; and it seems a pity to give space to the defunct Duncan multiple range test.

QUINN MCNEMAR

JOSEPH H. GREENBERG (Ed.). *Universals of Language*. 2nd Ed. Cambridge, Mass.: M.I.T., 1966. 1 p. xxvii + 337. \$2.95.

This book, containing papers originally given at a conference in 1961, has been reissued in paperback and the contents are unchanged except for the correction of over 100 errors that marred the first edition. Although linguistic theory has undergone many important revisions since the early '60's, the empirical observations contained in this collection retain their significance for everyone interested in language and language behavior. For an extended review by George Miller, see *CP*, November, 1963, 8, 417-418.

WALTER S. STOLZ

STARKE R. HAFHAWAY and ELIO D. MONACHESE. *Adolescent Personality and Behavior*. Minneapolis, Minn.: University of Minnesota Press, 1963. Pp. xiii + 193. \$5.75.

In the tradition of several other data-rich references dealing with the systematic evaluation of empirical relations between MMPI patterns and behavior dimensions, this book provides a companion study based on longitudinal investigation of 15,000 9th grade boys and girls. The primary objective of the authors was to determine whether it is possible to predict subsequent development of desirable or undesirable behavior patterns from MMPI scales. They found the possibilities modest over-all although prediction success was more encouraging for "average" behavior than for patterns markedly extreme in either a positive or maladjusted direction. For example, conduct problems and delinquency were often associated with elevations of MMPI scales. But the personality patterns were diverse, not monotonic.

The authors also cautiously undertook a synthesis of the massive data for understanding the antecedents of later

behavior problems, the implications of which have considerable importance for development of effective methods for dealing with adolescents' problems. By their own admission, however, the intricate intricacies made the task prohibitively difficult, leaving the reader with a mild sense of disappointment. Regardless, the book is of unquestionable scientific value as an attempt to deal with complex behavioral predictions having profound social significance.

GEORGE PARKER

BRIAN HILL (Compiled by) *Gates of Horn and Ivory: An Anthology of Dreams*. New York: Taplinger, 1968. Pp. xix + 216. \$5.95.

This anthology consists of several hundred dreams recorded by famous men and women throughout history. The dreams are presented without comment or interpretation.

CALVIN HALL

LEO F. HOLLISTER. *Chemical Psychoses: and Related Drugs*. A Monograph in the Bannerstone Division of American Lectures in Living Chemistry. Springfield, Ill.: Thomas, 1967. Pp. xi + 190. \$8.00.

This volume is a timely review of psychotomimetic drugs covering their history, types, clinical syndromes, physiological, biochemical, electrical, and behavioral effects, as well as the therapeutic use of these drugs in a variety of psychopathological states.

I. JAY KNOPP

HERBERT H. HYMAN and ELEANOR SINGER (Eds.) *Readings in Reference Group Theory and Research*. New York: Free Press, 1968. Pp. xi + 509. \$10.95.

Add another to the exploding population of "readings" in social psychology. Just over twenty years ago, Newcomb and Hartley showed that a carefully constructed anthology could help to define a field, could serve in some cases as a textbook substitute, and could earn money for the publisher. Many others have since sought to share the expanding undergraduate market by organizing collections of research papers

that express the editor's view of the field's boundaries and topical highlights. The present volume exemplifies a more recent trend toward readings that focus on a particular topic such as persuasion, attitudes, or, in the present case, reference groups. The social psychologist will find many old friends here: Kelley's paper on the two functions of reference groups, Charter and Newcomb's paper on experimentally increasing reference group salience, Festinger's theory of social comparison processes, Hyman's early paper on the psychology of status (in which the reference group term was first introduced), and portions of the Bennington study. As this sampling suggests, many of the offerings have appeared in other anthologies. There are a number of recent papers on psychological aspects of social comparison that are not included. Nevertheless, this appears to be a useful collection of papers for middle-group or graduate courses that concentrate on the psychological impact of group memberships and exposure to the beliefs and values of others.

EDWARD E. JONES

SAMUEL Z. KLAUSNER (Edited, with a foreword by) *Why Man Takes Chances: Studies in Stress-Seeking*. New York: Doubleday-Anchor, 1968. Pp. xii + 267. \$1.45.

Nine papers originally presented at an Air Force-sponsored conference on stress-seeking in man. The intent of the conference was "to draw together psychological, sociological, anthropological, and literary materials related to voluntary stress seeking or tropistic behavior in man." The editor, whose thoughtful but rather pedestrian paper leads off the more empirical half of the volume, has assembled an interesting roster of contributors. They include military journalist S. L. A. Marshall, novelist-essayist Kenneth Burke, physician-mountaineer Charles Houston, historian David Brion Davis, plus a scattering of social scientists. They all seem to be at the stage of being excited by the paradox of pain-seeking and disequilibrium, but no one seems to have many solid clues as to why men take chances.

EDWARD E. JONES

SHELDON G. LEVY. *Inferential Statistics in the Behavioral Sciences*. New York: Holt, Rinehart and Winston, 1968. Pp. 267. \$7.95.

An essentially sound but excessively tedious textbook that may or may not be the answer for that introductory course. The stress is on inference.

QUINN MCNEMAR

RICHARD L. SCHIEFELBUSCH, ROSS H. COPELAND, JAMES O. SMITH (Eds.) *Language and Mental Retardation: Empirical and Conceptual Considerations*. New York: Holt, Rinehart & Winston, 1967. Pp. 218. \$5.95.

The articles in this collection were originally presented at a conference. Apparently, many of the participants were selected because their interests seemed potentially related to the topic rather than because they had already demonstrated a concern with the relations between language and retardation. Thus, Carroll writes on psycholinguistics, Rosenberg and Cohen on referential processes, Michael on operant conditioning. These articles tend to have better counterparts (often by the same authors) elsewhere in the literature. It is not entirely clear who will use this book; it isn't sufficiently detailed to aid the researcher nor does it provide an overview that would be appropriate for students.

JANELLEN HUTTENLOCHER

MARVIN B. SCOTT. *The Racing Game*. (From "Observations," a series edited by Howard S. Becker.) Chicago: Aldine, 1968. Pp. ix + 186. \$5.95.

An impressively knowledgeable view of the race track and its denizens: pros, touts, trainers, jocks, grooms, stewards, and many others. The author, a sociological interactionist in the Erving Goffman tradition, renders the broad game of horse racing in terms of participant strategies of managing or controlling information. As an "information game," horse racing can best be understood as a complex web of managed impressions. Each participant, but especially the trainer and the large bettor, is motivated to mislead other participants concerning his intentions.

The author provides fascinating illustrative material to document the tactics of information control by the various parties involved. At times the sociologizing is intrusive; it often seems unnecessary, adding little to the incisiveness of the account. But the narrative style is unusually clear and the reader is gently swept into the intricacies of the parimutuel system, the operations of bookies, the subtleties of information transmission in the paddock, and distinctions among the different kinds of races, coming out with an effortless understanding of the highlights of the "game." The author is far from a passing observer of the roles, scenes, and tactics he describes. He acknowledges his 15 years of access to almost every aspect of horse racing. Familiarity, involvement, and fascination with his subject matter bring almost every page to life. Whether or not one wants to call this social science, it is first rate, intellectually vigorous journalism. Psychological and sociological insights abound, but most of these would make as much sense to the *Sports Illustrated* subscriber as they do to the professional social scientist.

EDWARD E. JONES



Student life at Bologna was fairly free and easy. It was the professors who were kept in order by strict regulations! A teacher had to swear to obey the Rector, or be deprived of the right to teach at all. He was fined if he fell behind schedule in his course of lectures or if he left anything out, or if he was late in starting his lecture or went on speaking too long. He was also fined if the attendance at his class fell below a certain number. He must not take a day's leave without special permission from Rector and students; and if he left the city he had to pay a deposit which was forfeited if he did not come back. If he married, his honeymoon was limited to one day.

—ANGUS ARMITAGE



ON THE OTHER HAND



In this Department CP invites discussion of reviews and of books reviewed. Here is the place for that kind of intellectual dissent that promotes progress in understanding. Let your criticism be ad verbum, not ad hominem. Sel-dom does a criticism merit more than half the space of the text criticized—never more than equal space and then only when the letter is interesting and well written. CP edits letters when it thinks they should be. Single-spaced letters will be returned for double-spacing. Please send carbons.

WHERE TO FIND OUT ABOUT FILMS

As a moderate user of audio-visual aids, I am a steady reader of the "Instructional Media" column. The June edition (CP, June 1968, 13, 327) by Guild and Blick recommends Penn State's *Psychological Cinema Register* as "unquestionably the best single listing of instructional films in psychology."

I wouldn't argue about what university has the best film library, but obviously a catalog that lists offerings from several university film libraries and other sources can top it. Such a catalog is *An Annotated Catalogue of Films in the Behavioral Sciences*, by J. M. Schneider and D. E. Kemp, available from Behavioral Sciences Audio Visual Laboratory, Department of

Psychiatry, Neurology, Behavioral Sciences, University of Medical Center.

The only catch is, the city film libraries send catalogs if you have to pay for. It is well worth LEIGH MA City Univer New York

PSYCHOANALYSIS

Too bad about the capsule treatment of Georges I. Critique des Fondements de la Psychologie on page 315 of the June issue. I never had read the book he would have found out that its basic concern is psychoanalysis and not "class psychology." If he were acquainted with present day French psychology he would know it is a pivotal reference in recent discussions of psychoanalysis. The problems of conceptualization in understanding personality are far from "anachronistic" today.

ERLING ENG Lexington, Kentucky



Suffering is in proportion to the strength which has been accorded to a person; in other words, the weak suffer more, where the trial is the same, than the strong.

—DUMAS



Out of the Darkness Into the Light

by Jerome Hellmuth (Ed.)

Educational Therapy. Vol. I. Special Child Publications, 5. Pp. 468, \$10.00.

Reviewed by BARBARA K. SUTHERLAND

Editor, Jerome Hellmuth, is Director of the Seguin School, Seattle, and editor of a series of symposia, published by Bernice Straub, for the advancement of communication on the special child. Two of these volumes are *The Special Child in Century 21*, *The Special Child: Diagnosis, Treatment, Habilitation, and Prevention*, and recently, *The Disadvantaged Child*. The reviewer, Barbara K. Sutherland, received her PhD from Radcliffe College, and since the days of thesis writing, one of her main interests has been the underachieving child. Although now semi-retired and the mother of five children, she continues to work in this area through part-time private practice. She is Research Associate, Children's Medical Center, Boston, and Consultant, Leslie B. Cutler Clinic, Norwood, Mass.

IN our society today there is a great dismal wasteland. It is a wasteland that, if properly cultivated and cared for, would become productive, fertile land. It is the wasteland of talent, of intelligence, of capability, and it is filled with those who, for one reason or another, are unable to utilize their native intellectual capacity to its fullest extent. We find these lost talents among the mentally retarded, among the emotionally disturbed, among the culturally underprivileged, and among those with more specific learning disabilities.

Jerome Hellmuth, in this collection of papers titled *Educational Therapy*, has brought together eighteen accounts of various attempts throughout the nation to help these educationally handicapped members of our society to develop their basic abilities to the highest possible level.

Ivy Mooring, in her paper on community organization on behalf of the

retarded, describes the program in Los Angeles County for the more than 100,000 retardates in this area, showing clearly the necessity for community cooperation, understanding, acceptance, and support for such programs. William J. Younie in his paper describes various approaches to educational therapy for the mentally retarded in the state institutions, indicating the need for careful examination and reassessment of such programs. It is clear from these essays that while there is awareness on the part of education of the possible expansion of the contributions of retardates in the society, there is at the same time a great deal more to be attained in this area if our treatment for these individuals is to go as far beyond custodial care as possible.

IT has perhaps been more evident to the world in general that the emotionally disturbed portion of our population represents a lost canyon of intellectual talent. In this collection of papers, several authors including W. W. Lewis, Edward L. French, Carl Fenichel, and others describe various approaches to this problem, both in terms of regular classroom techniques and institutional methods. Again we see growing awareness of an untapped reservoir of ability in our society and efforts toward making this reservoir available for use.

The papers dealing with specific language disabilities or dyslexia among children of normal intelligence are of great interest. From the medical point of view, Helen Gofman stresses the importance of training physicians to be aware of this difficulty, as they are often the ones to spot the neurological handicap of the non-reading child. Preventive programs are described by Beth H. Slingerland and Belle Dubnoff; there is current state legislation in various locales that would provide proper training for dyslexic children so that they can realize their potential.

Many of the authors mention the necessity for special training courses for the teachers of these groups and describe such programs of training. But while the need for careful selection of personnel is mentioned there is no real presentation of methods of selection

that might be used. This strikes me as a prime consideration that should be dealt with fully and in detail. Special personality attributes of teachers who are to help these handicapped people are perhaps far more important considerations than the training *per se*. I feel that this volume would have been enriched by a direct dealing with this problem.

In general, I feel that Hellmuth has done a great service in bringing together this group of timely contributions to the field of educational therapy and in thus promoting more interest in expanding the horizons for a segment of our population that was once considered as largely parasitic rather than as productive in their own right.

BOOKS RECEIVED

ADAMS, JACK A. *Human memory*. New York: McGraw-Hill, 1967. Pp. 326. \$9.50.

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Explorer on the Run

Raymond B. Cattell and Frank W. Warburton (with the assistance of Fred L. Damarin, Jr. and Arthur B. Sweney)

Objective Personality & Motivation Tests: A Theoretical Introduction and Practical Compendium. Urbana: University of Illinois Press, 1967. Pp. xi + 687. \$20.00.

Reviewed by LEWIS R. GOLDBERG

Those few psychologists who may not know of Raymond B. Cattell, Research Professor at the University of Illinois, will be so informed in the review. Frank W. Warburton, his collaborator, is Professor of Experimental Education at the University of Manchester in England. Fred L. Damarin, Jr., a '56 Chicago PhD, worked with Cattell from 1958 to 1960 when he moved to Educational Testing Service. Arthur B. Sweney, after a '58 PhD from Houston, was at Illinois with Cattell until 1962, then went to Texas Technical College.

The reviewer, Lewis R. Goldberg, has appeared on these pages before (CP 1964, 9, 199-201). He has remained at the University of Oregon and Oregon Research Institute, where he studies the processes involved in personality assessment, clinical judgment, and college teaching. Last year he spent his first sabbatical as a Fulbright Professor at the University of Nijmegen in the Netherlands.

THE SENIOR AUTHOR of this volume is America's (and perhaps the world's) most productive psychologist; he has averaged one book or published

test, one chapter in others' books, and 10 journal articles and/or technical reports per year, over a period of nearly 30 years. His contributions to psychology are now so enormous that the present review must be viewed as part of a continuing dialogue (see CP, 1958, 3, 323-325; CP, 1963, 8, 467-468; CP, 1966, 11, 236-238; CP, 1966, 11, 508; CP, 1967, 12, 40-41) concerning the influence (or lack thereof) of Cattell's genius on the scientific study of personality.

This book—like most of Cattell's works—is simply impossible to review sensibly in 2,000 words, for the volume contains at least two "books," both of considerable importance to psychologists studying personality and motivation. One of the "books" is a compendium of 412 tests, with descriptions of the 2,366 test scores that Cattell and his associates have derived from those tests (1 to 50 scores from each test), factor loadings of each test score (when available and above an arbitrary criterion), the psychologist's—and the subject's—test title, the appropriate age range for the test, some estimate of testing time, brief directions for test administration and scoring, a short extract of the test



RAYMOND B. CATTELL

materials themselves—and, most importantly, a paragraph or two about the theory leading up to the development of the test, the rationale for its construction, and the stages of design and modification of the final test. Each test—and each of the test scores—has been given a number; five indexes list the 412 tests (a) by test number, (b) alphabetically by test title, and (c) by their manifest content, and list the 2,366 test scores (d) by variable number, and (e) by the factors on which they load. As a result of their efforts, the authors:

... hope in launching this imperfect Compendium . . . that it will stimulate other psychologists to proceed with similar inventiveness . . . to expand the behavioral horizon of objective tests available to us for determining the dimensions of personality" (p. 6-7).

While the test compendium was put

together by Warburton (based largely on tests devised by Cattell and his associates), the other "book" within this volume is pure Cattell—plus two chapters authored by Sweney. Included within Cattell's eight chapters are three that have some major relevance to the compendium: Chap. 3 ("The System of Describing and Indexing Tests and Behavioral Variables"), Chap. 7 ("Some General Psychological Principles in the Designing of Objective Personality Tests"), and Chap. 8 ("Designing Tests for Validity against Explicit Concepts"). The remaining five chapters, dealing with general principles of personality structure and measurement (including an interesting taxonomy of tests, and Cattell's most recent views on test validity, reliability, and usefulness), really belong elsewhere if they are to be read by the audience Cattell seeks to capture.

AND they should be read! For what emerges out of these loosely organized and (seemingly) hastily prepared chapters is a glimmer of Cattell as psychology's master strategist. No one else has Cattell's scope of the entire panorama of personality structure—and few are so poor at sharing their vision of the forest with most of us who peer solely at a few trees. Virtually all previous criticism of Cattell has focused upon Cattell the tactician and has brushed aside Cattell the strategist—a fault akin to ignoring Freud on the grounds that free association is a poor measurement technique. Cattell has been roundly criticized because his efforts to chart "the whole domain of personality structure" have prevented him from focusing concerted attention on any one delimited portion of the total task. For Cattell is a broad-band psychologist, while most of his colleagues today are narrow-band ones. Cattell attempts to be psychology's Linnaeus—the great taxonomist—the sprinting explorer whose goal is the discovery of all the major sources of covariation in behavior. Cattell defends his taxonomic bent:

"The aims and values of a comprehensive, nonsubjective taxonomic scheme, expressed in concepts of wide theoretical or practical negotiability . . . are



F. W. WARBURTON

not merely to achieve academic neatness. On the contrary, as in the periodic table in chemistry, or, in a more abstract way, the covariation chart in psychology, we soon perceive that a valid scheme for ordering existing material or methods is commonly very fertile in producing new concepts and practical possibilities. It reveals underlying laws, suggests new principles, and permits extrapolation from existing limited elements to unrealized new combinations, which would otherwise only be found slowly and fragmentarily by the course of merely random exploration" (p. 87).

And Cattell is certainly no random explorer. For the past 30 years he has proceeded "by an explicit representative framework, combining logically possible parameters systematically, as an early geographical explorer might extrapolate a framework of latitude and longitude to be covered by his voyages in search of land . . ." (p. 74).

COMBINED with this strategic genius, however, one finds in Cattell's work some research tactics that leave much to be desired. As just one example, why should a man so enamoured of objectivity in science ("replicability is the essence of scientific transactions" [p. 4]) favor judgmental—albeit "blind"—rotational procedures to analytic ones? Equally exasperating, moreover, is Cattell's writing style, that contains at least three qualities almost bound to infuriate the reader. First of all, there is Cattell's famous penchant for neologisms (e.g., "exviant," "inviant," "cortertia," "pathemia," "comention," etc.). Related to this practice is Cattell's apparent willingness to ignore

the definitions commonly used by other psychologists; for example, in an otherwise excellent discussion of test reliability, Cattell systematically interchanges the standard definitions of the terms "consistency" and "reliability" (p. 36). But perhaps the most irritating aspect of Cattellian style that most of his readers is his penchant for using snide innuendos at other psychologists, while describing with a certain lack of humility the efforts of his own research group. Other people's work is termed "maggie research," "research," "pedestrian," "cut and dried," "sadly stereotyped," "delusions," "panaceas," and "grandiose" and their instruments are "favorite gadgets," "gadgets," "toys," "parlor games," "museum pieces." The work of Cattell's associates, on the other hand, is described a bit more gingerly; e.g., "It is unlikely that any existing personality test of relevance or importance slipped through the theoretical net of our systematic approach" (p. 110).

Now each of us has a right to his own peccadillos, and as fertile as Cattell's mind may be, he has had an extra share. But, the sequence of this particular egoism is that Cattell becomes all too cut off from those of us "myopic" who most need his direction. One of the many possible examples of Cattell's poignant alienation from the metric mainstream, let us raise the question most likely to be raised by potential users of the compendium—namely, the nature and content of the "objective tests" included within this volume.

What is an "objective test?" As the term has been used by psychologists over the past 30 years, at least three major meanings have emerged; "objective" may refer to: (a) the use of some pre-selected set of response options (e.g., true-false, multiple-choice), as compared to any "open-ended" procedure; (b) the provision of some explicit scoring key, as compared to any more judgmental scoring procedure; or (c) the use of some "maximum performance" type of instructions, so that subjects can only change their "true score" in one direction (e.g., subjects might score lower than they "deserve"—as they might be motivated to do on a selective service

aptitude test—but can not [without gross cheating] score higher than their “true” score).

Since psychologists have never agreed among themselves as to which of the three criteria constitutes a definition of an objective test, a good deal of the banter about such tests in the psychometric literature has been somewhat less than clarifying. And Cattell may have added to the confusion by explicitly rejecting *all three* criteria. To Cattell, a test—objective or otherwise—may be defined as “. . . an artificial, portable, standardized situation, which the subject recognizes as such and voluntarily enters, agreeing to respond (by a mental set) within specified qualities of response limit set by instructions, and the responses to which are measured or classified according to rules agreed upon by psychologists and capable of giving an acceptable consensus in scoring” (p. 16). Thus, Cattell rejects criterion (b) as an essentially trivial aspect of objectivity and instead incorporates it as what he calls “conspic” or “conspicuous” reliability within the definition of a test itself. Cattell also rejects criterion (a), as merely one of some 11 facets of test response (e.g., restricted vs. unrestricted, inventive vs. selective, single vs. repetitive, ordered vs. unordered, homogeneous vs. heterogeneous) by means of which *all* tests can be classified. Furthermore, in Cattell’s hands, criterion (c) suffers the same fate, being considered as simply another facet of test response, termed “natural vs. willed-limit” in his over-all test taxonomy.

Cattell defines an objective test as one on which “. . . the subject does not really (he may believe he does) know for certain in what way his behavior is being measured or what kinds of personality inference will be drawn from his test reactions” (p. 16).

“. . . the real art of the psychologist . . . is to produce the kind of test which disguises (from the subject) what it measures!” (p. 35).

Disregarding the ethical implications of defining the psychologist’s “art” as somehow to fool the subject—and I believe these ethical concerns are of considerable importance—let us simply examine Cattell’s definition of “objective” from a technical point of view. First of all, his definition shifts the criteria for establishing objectivity from the test material and instructions to the introspections of each individual being tested. A test—by Cattell’s definition—is objective if the subject doesn’t know the tester’s scoring rationale; consequently, for any given test and testing session, some of the subjects may be

administered an objective test while others may not. Moreover, for any one test, some scoring keys will be objective (for some subjects) and other keys will not. Of even greater significance, Cattell’s redefinition of objectivity places the concept outside the usual domain of scientific usefulness—since most psychologists are unwilling to concede knowledge of the inner thoughts of other individuals.

On the other hand, one might argue that even if Cattell’s definition is technically and/or ethically ambiguous, it might still be true that those tests that were included in this compendium are clearly different from those that were not. One way to verify this hypothesis is to examine the content and instructions of the 412 tests—a job that few psychologists other than the authors and this reviewer are going to take the time to do. Consequently, a breakdown of the tests in terms of the authors’ classification of their “manifest content” may help the general reader:

MANIFEST CONTENT	NUMBER OF	
	TESTS	SOME EXAMPLES OF TESTS IN EACH CATEGORY
Ability tests	186	Numerical Ability; Balloon Blowing
Aesthetic tests	11	Poetic Preferences; Autistic Projection
Games (and doodles)	6	Hare & Hounds game; Poker game
Opinionnaires	39	Ideal-Self Values; Humor Test
Perceptual tests	22	Reaction Times; Hidden Pictures
Performance tests	14	Mazes; Tapping; Altruism
Physical tests	12	Body Sway; Dynamometer
Physiological tests	17	GSR; EEG; Hand Tremor
Preference tests	7	Smell Preference; Paranoid Idens
Projection tests	17	Rorschach; Criticalness of Drawings
Questionnaires	76	Health Inventory; Self-Concept; Acquiescence
Situational tests	5	Classroom Behavior; Suspiciousness

WHILE the reader should judge for himself, it is the reviewer’s opinion that there is no simple rule that would allow someone outside Cattell’s laboratory to decide for a given test whether it is objective or not. The Rorschach, by Cattell, is objective; the MMPI, with its hundreds of different scoring keys (on not *all* of which could any subject “really know for certain what kinds of personality inference will be drawn from his test reactions”) is not. Clearly some other criterion than Cattell’s will be necessary if independent investigators are going to classify tests with even a minimal amount of “conspicuous reliability.”

Regardless, however, of the name (or set of names) that eventually will be ascribed to these tests, the fact that they have been collected in one volume should prove of enormous significance. In the authors’ words:

“To the basic researcher, test measurements are laboratory procedures, the ultimate aim of which is the discovery of personality structure and the precise elucidation of the laws by which personality operates and develops. As soon as a certain degree of such personality factor structure appears, manipulative (controlled) univariate and multivariate experiments become possible upon the origins, effects, and interactions of the unitary traits, provided the tests have led to valid batteries for various factors. The applied psychologist, also, desires such batteries, and in contributing to his predictions of clinical, industrial, and so on, criteria they achieve such criterion associations as add

strongly to our basic understanding of the personality factors” (p. 27).

Since the present volume completes Cattell’s trilogy of major works on personality structure (the first being Cattell’s 1957 volume, *Personality and Motivation Structure and Measurement*, and the second being the 1965 volume by Hundleby, Pawlik, and Cattell, *Personality Factors in Objective Test Devices*), the time is ripe for some intensive research on the over-all scientific utility of Cattell’s global strategy. For only by means of controlled experiments using Cattell’s “unitary traits” will we be able to test the extent to which Cattell, the global explorer, has succeeded in mapping the major features of man’s personality space.

An Ally for Empiricism

Richard M. Warren and Roslyn P. Warren (Eds.)

Helmholtz on Perception: Its Physiology and Development. New York: Wiley, 1968. Pp. x + 277. \$9.95.

Reviewed by E. G. BORING and S. S. STEVENS

Helmholtz is Helmholtz. Richard M. Warren and Roslyn P. Warren are both affiliated with the University of Wisconsin-Milwaukee. Richard Warren is Professor of Psychology and Roslyn Warren is Associate Professor of Zoology.

The two reviewers are well known to American psychology. The first, the late E. G. Boring, who passed away on July 1, 1968, was Professor Emeritus of Psychology at Harvard University and the founding father of CP. Until the end of his very distinguished career as a psychologist he was full of pithy (and sometimes feisty) remarks to the Editors of CP. The second reviewer is S. S. Stevens, well-known Professor of Psychophysics, also at Harvard.

Reviewed by E. G. BORING

HELMHOLTZ was one of psychology's great and one of its founders as an experimental science. Everybody knows the three big volumes of *Physiological Optics* and the lesser classic on the *Sensations of Tone*, that whole mass of sensory fact which is now almost a hundred years old, both at present now in English and much used. They were for Helmholtz the work of only a little more than the decade of 1856-1867. Much less forbidding and delightfully readable are his *Popular Scientific Lectures*, also in English. Still later comes his address on Founder's Day at the University of Berlin in 1878, which was published in 1879, well after Helmholtz

had moved from the chair of physiology at Bonn to the chair of physics at Berlin. He was still loyal to his early concern with psychology, and this little volume was called *Die Thatsachen in der Wahrnehmung* (1878). It was never translated until now at last the Warrens have done it. An excellent translation it is, and, ninety years late, the American psychologists can see why "perception" is more than "sensation," is sensation worked up into knowledge. Helmholtz kept his interest in perception until the end. In 1894, the year of his death, he published in the new German *Zeitschrift für Psychologie und Physiologie der Sinnesorgane* his essay *Ueber den Ursprung der richtigen Deutung unserer Sinneseindrücke*, which the Warrens have also translated. In the empiricist-nativist controversy, Helmholtz, like Lotze before him and Wundt after him, was a staunch empiricist, whereas Hering, like Kant before him and Stumpf after him, was a nativist. This orientation of Helmholtz's appears in these later essays, as does also his conviction that the geometrical axioms are not innately given to man with his brain but are learned.

Reviewed by S. S. STEVENS

PSYCHOLOGY's debt to the Warrens lies in their having seen fit to repackage in a convenient form those parts of Helmholtz that bear most directly on his empiricist philosophy. In the process the editors have translated

some fifty pages not previously available in English, including a paper published the year Helmholtz died. To the end, apparently, Helmholtz defended the importance of the role he had earlier assigned to "unconscious inference" as the basis of many of his conclusions.

The Warrens' debt to Helmholtz lies in the circumstances of his perseverated for almost 40 years his devotion to empiricism. It has been safely laid to rest and is now available as an unproven hypothesis to those who would claim otherwise. The Warrens' need for a defender stems from the fact that even the experience of Helmholtz's theory—on the visual field, from dimness to dazzle—has been dismissed. As they say in the preface, Helmholtz's judgments of sensory magnitudes, his disguised estimates of physical dimensions associated with sensory stimulation, are in keeping with Helmholtz's theory.

How would Helmholtz have reacted to the claim that his theory of operating characteristics of the sense organ duplicates the processing of intensity? He died before any other striking discovery distinguished the various sensory systems with respect to intensity he saw that he had progressed beyond 1878 to locate Helmholtz's theory of intensity issue is a matter of exercise—as futile perhaps as the nativist-empiricist debate itself.

It seems probable, nevertheless, that Helmholtz would have demurred at the allegation that he "believed that human perception had few, if any, innate components. . . ." And he may well have raised an eyebrow had it been claimed in his name that "the interpretation of supraliminal sensory input depends solely upon learning" (p. 17). By using such assertions to introduce the reader to this volume, the Warrens do little to strengthen the case for the inductive inference that Helmholtz was trying to sell, exemplified by the unconscious, irresistible experience of the perception of contrast or the singleness of binocular vision. But the editors have served us well by giving us more than 200 pages

in which Helmholtz speaks for himself, by argument, example, and ingenious demonstration. The editors have selected wisely, some from the large forbidding Handbooks and some from the popular lectures by which Helmholtz charmed a wide audience with his instructive and scientific discourse.

THE VOLUME begins with a brief but interesting sketch of Helmholtz's life, followed by some comments on the significance of his views. Thereafter, each selection from Helmholtz is introduced by a paragraph or two of comment by the editors. The first selection treats the causes of harmony in music, a popular lecture that contains the essential substance of what later became the classic volume, *Sensations of Tone*. Here we find Helmholtz venturing to conjecture, as he phrased it, that each hairlike ending in the inner ear is tuned to a certain tone like the strings of a piano.

Next follows a popular lecture on "The recent progress of the theory of vision," recent being ante 1867. It still makes informative reading on how the eye does its work. And it is here that Helmholtz expounds and defends the three-color theory put forth by Thomas Young, "one of the most acute men who ever lived, but [who] had the misfortune to be too far in advance of his contemporaries" (p. 94). In this lecture Helmholtz also touches on the phenomenon of contrast, which consists, he said, "in mistakes as to local color" (p. 105). As the editors remark in their notes at the end of the book, this view of contrast failed to win wide acceptance. Indeed it is on this issue of color induction that Helmholtz has perhaps proved most vulnerable.

If we do not learn the inductions of color contrast, at least we learn, as Helmholtz shows, how to compensate for the distortion of prismatic spectacles. At first we reach to the wrong place for an object, but with time and practice "a fresh correspondence is formed between the eye and the hand" (p. 113). And if the newly hatched chick orients more rapidly than the human infant to the source of its dinner, Helmholtz proposes an alibi. "The process is all the

quicker [in the chick] because the whole of the mental furniture which it requires for its life is but small" (p. 134).

There follows the popular lecture, "On the relation of optics to painting," in which the laws of form, shade, color, and harmony are expounded in a manner that has proved its use to many students of art. Here on p. 151 we meet Fechner and his *psychophysical law* paraphrased by Helmholtz in a way that seems quite correct, at least to this reviewer. But the Warrens say in a footnote that the statement is not accurate. Methinks the editors err.

From here on, in the three final selections, the nature of perception and its modification by experience find further exposition and argument. As already noted, we now have the Warrens to thank for the translation of two major pieces of Helmholtz. One of them, "The facts of perception," was said by a biographer of Helmholtz to be the "most beautiful and most significant of all his lectures." In its introductory oratorical flourishes, we find Helmholtz, age 57, extolling the virtues of past worthies—and beginning to sense the generation gap.

"How things have changed!" he exclaims, "... all of humanity's ideals of excellence are treated lightly in the streets and in the press, culminating in two abominable crimes [assassination attempts] against our emperor. . . ." Thereafter follows the admonition, "we must not comfort ourselves too easily with the consolation that other times were no better than ours" (p. 208). Thus we find in Helmholtz a concerned citizen as well as a great mind.

The volume is graced and made doubly useful by a names and a subject index.

One can acquire everything in solitude except character.

—STENDHAL

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Significant Titles

PSYCHOLOGY AND EFFECTIVE BEHAVIOR

By JAMES C. COLEMAN

This text provides a theoretical and practical approach to problems of human adjustment, emphasizing the individual as active and capable of interesting self-direction. Integrating scientific "objective" and experiential (humanistic) approaches, the text includes theoretical foundations of development, motivation, adjustment and maladjustment, extension of conceptual framework to social processes, and application to two specific fields (world of work, marriage and parenthood). The energy systems theory is extended, stressing uniqueness at each level of organization and the need to consider both minor determinants and field forces. Chapter summaries include brief glossaries of terms in chapters. May, 1969, 576 pages, illus., \$8.75

ANALYSIS OF DATA: INTRODUCTION TO STATISTICS FOR BEHAVIORAL SCIENCES

By RODERICK J. SPENTER,
University of Cincinnati
JOHN DAVID SINCLAIR,
Doctoral Candidate,
University of Oregon

This text offers instruction in the application of elementary statistical methods to problems common to the behavioral and social sciences and to education. Of special importance are the chapters on Analysis of Variance and Correlation. Simple concepts treated early in the text relate to everyday life, and complex concepts are presented as modifications of something the student has already studied. Each chapter concludes with a "problem and questions" section providing practice in using previously studied techniques and principles. An accompanying workbook is available. Spring, 1969, illus., 608 pages, \$9.75

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Finding Character Where the Action Is

Erving Goffman

Interaction Ritual: Essays on Face-to-Face Behavior. Chicago: Aldine, 1968. Pp. 270. \$5.75.

Reviewed by EDWARD E. JONES

The author, Erving Goffman, is Professor of Sociology, University of California, Berkeley. He is author of several books, among which are *Encounters*, *Asylums*, *Behavior in Public Places*, and *Stigma*.

The reviewer, Edward E. Jones, is Professor of Psychology at Duke University, though he spent 1967-68 as Visiting Professor at the University of Texas in Austin. He holds a 1953 PhD from Harvard University. He is author of *Ingratiation and, with Gerard, Foundations of Social Psychology*.

ERVING GOFFMAN is a widely respected exemplar of a sociological tradition that features acute observation and evocative rhetoric. Unfettered by stratified sampling requirements, significance tests, or reliability coefficients, Goffman goes where the interaction is and calls the game the way he see it.

The latest offering of Goffmanesque wit and wisdom is a lengthy essay entitled "Where the Action Is" that is preceded in the volume under review by five previously published articles: "On Face-Work" (1955), "The Nature of Deference and Demeanor" (1956), "Embarrassment and Social Organization" (1956), "Alienation from Interaction" (1957), and "Mental Symptoms and Public Order" (1964). More than one might expect, given the time span involved and the opportunism of pub-

lishers, these hors d'oeuvres concern closely related themes and effectively set the stage for the main course. This is especially true of "On Face-Work," a classic paper that stakes out the major focus of Goffman's concern in the intervening years: the expressive or ritual aspects of social behavior and the implications of these for self-definition and social equilibrium. This concern is strongly represented in "Deference and Demeanor," an essay that weaves anecdotes from hospital ward life into a more refined analysis of "ceremonial activity" centering on the granting and the claiming of self-esteem. "Alienation from Interaction" is a deft dissection of the conversational moment and the delicate balance of involvements required to sustain the interaction and make it successful for both participants. This essay is typical of those in which Goffman hopes to shed light on the dynamics of larger and more stable social systems by focusing on minor, transitory phenomena.

This same hope is apparent in "Where the Action Is," the novel contribution to this volume. In range of concern, this may be the most ambitious analysis Goffman has yet attempted. It is an off-shoot of his intensive observations of casino gambling, but in it the author addresses his inquiry to the widest spectrum of "fateful moments" in

everyday life. These are the moments of action: "activities that are consequential, problematic, and undertaken for what is felt to be their own sake" (p. 185). Much of the essay is descriptive, providing examples of action that fall out of Goffman's offbeat tradition. Here we learn about the movement of fateful moments in bull-fighting, pool hustling, bee-keeping, burglary, automobile racing, duels, "making one's sword swallowing, executions, and, of course, the game of chicken.

BUT why do people go where the action is? What is the significance of this voluntary exposure to fateful moments? In attempting to answer this question, Goffman characteristically sees functional implications both for the individual and his group. The individual gains information about his character, partly in a direct way, partly by reading the impact of his action in the reactions of others. Tests of character are sometimes thrust upon us, but more often we find ourselves seeking them out. We go where the action is in a persistent attempt to make fateful events and in the process to demonstrate courage, integrity, gallantry, or composure. Even those who cannot afford the risks of action can participate vicariously in the fateful moments of race drivers, stock market players, and military commanders. The social functions of fateful action-taking are also not hard to find. For the individual to be useful to society, he must be in sufficient physical and characterological command of himself to sustain social norms. When the individual clearly appreciates the chances he is taking and does not become disorganized by this appreciation, he will "bring to moments of society's activity the stability and continuity they require if social organization is to be maintained. Society supports this capacity by moral payments, imputing strong character to those who show self-command and weak character to those who are easily diverted or overwhelmed" (p. 259).

Beneath the kaleidoscopic surface of Goffman's prose lie several themes or preoccupations that persist across the span of his work. (1) There is a fasci-

nation with the interpenetration of the personal and the social. The development and maintenance of the self is a prerequisite for the establishment of norms, and normative adherence is an important vehicle for personal expression. (2) Goffman is preoccupied with the complementarity of social perspectives. Character attributes are claimed and reputations granted. Demeanor in the one who puts forward a face calls for deference from the beholder. (3) Goffman is recurrently impressed with the delicate balance of forces that generate movement within an interaction episode. Social behavior is fragile and threatened by too much of any good thing. Rules of social behavior are fundamental to the game, but "if all the rules . . . are exactly followed, the interaction may become flaccid, stale, and flat" (p. 130). Or again, Goffman describes the balance between spontaneous involvement in a conversation and the need to maintain control—to stay alive to touchy issues. Sometimes the balance theme is stated in dialectic terms. Thus a "peculiar tension" must be maintained between presentation rituals (expressions of regard) and avoidance rituals (keeping one's distance). "These opposing requirements of conduct must somehow be held apart from one another and yet realized together in the same interaction: the gestures which carry an actor to a recipient must also signify that things will not be carried too far" (p. 76). (4) Few things appear more important to Goffman than the maintenance of social order. Fateful moments are prized because of the contributions of action to morale and continuity. Social life would wither if individuals did not "come to all their little situations with some enthusiasm and concern," and these qualities are provided by the implications of action for character validation.

SIMPLE declarative statements of these themes and concerns have a mild sedative effect. After all, we have all heard of dynamic equilibria and have a shared conception of norms, individuality, and their interplay. There is a significant social psychological literature that deals with such matters in detail and with

supporting quantitative data. Goffman writes as though this literature did not exist. He holds us not by his major themes, or the fidelity of his scholarship, but by his discerning use of examples and his winning rhetoric. His gifts include the ability to see the functional and the universal in the transient and the ordinary. His ear is tuned to the social implications of interaction rather than the substantive content, and to the implicit understandings that govern social life rather than the codified agreements.

But above all, it is his style that sets Goffman apart. There is a kind of recurring redundancy as he presses his argument. There is statement and restatement, old points reasserted from new angles; phrases and paragraphs are kneaded like dough to express just the right emphasis, to generate just the right amount of surprise. A favorite trick is the startling exemplification string—the use of disparate examples to define the boundaries of his concern: "... a readiness to become over-involved is a form of tyranny practiced by children, *prima donnas*, and lords of all kinds . . ." (p. 123); We should study "in detail the remarkable disruption of social settings produced by hypomanic children, youthful vandals, suicidals, persons pathologically obsessed by the need for self-abasement, and skilled saboteurs" (p. 170). Goffman is also addicted to plays on words that, at their best, are evocative and memorable but can also be strained and distracting: "What is special about the criminal enterprise . . . is the . . . high price that must be paid for thoughtlessness and bad breaks. This is the difference between holding a job down and pulling a job off" (p. 166). And a propos of facing death gracefully, "Pass through the teeth of eternity if you must, but don't pick at them while doing so" (p. 232).

The true measure of this kind of a contribution is not the accession of firm data about social behavior. Goffman intrigues us by reminding us of what we already intuitively know, by manipulating imagery through apt anecdotes that evoke the nod of recognition. He helps us to grasp the genotypes that underly disparate behavioral episodes and to

recognize the sustaining functions of commonplace social phenomena. This is enough of a contribution for the moment, and readers of *Interaction Ritual*—especially "Where the Action is"—will find a Goffman at the peak of his form.

Abnormal Vignettes

Elton B. McNeil

The Quiet Furies: Man and Disorder. Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. xi + 207. \$5.95.

Reviewed by BERNARD I. LEVY

The author, Elton B. McNeil, received a Michigan PhD and is now Professor of Psychology at the University of Michigan. He is also Director of the Michigan Fresh Air Camp for "Children Who Hate." He has produced a prize-winning series of television programs on scientific psychology and is the author of *The Nature of Human Conflict*.

Bernard I. Levy, the reviewer, is Chairman and Professor of Psychology, The George Washington University. He has been Director of Clinical Training for four years before becoming Chairman. His PhD is from the University of Rochester.

ELTON B. MCNEIL is a fine clinician. One does not have to know him personally to arrive at that judgment; one need only read *The Quiet Furies*. In the book one glimpses a style of practice and a generosity of spirit which combine to make a range of clinical experience well worth reporting.

A wide and diverse set of Professor McNeil's own cases constitute the contents of the book. They are more case vignettes than the usual ponderous and

too detailed recitations of all historical facts that *might* bear upon a person's life. McNeil emphasizes the central problem of each case and gracefully places it into a context with just the right amount of relevant history to make the problem understandable.

The diversity of his cases is remarkable, particularly when it is recognized that the author excluded those that typified severe psychotic reactions. He did so because many psychotic patients, being bizarre and bewildering to most readers, do not allow for the empathy he wants to create. But even limiting his cases to people who are neurotic, who are suffering from character disturbances and who have understandable psychotic reactions, Dr. McNeil still shows a sense of the contemporary that extends beyond the textbooks. Case 11 is entitled, "Where Did You Go On Your Trip? (Personality Disorder: Trait Disturbance—LSD)", and Case 19 is "The Swinger—Twenty Years Later (Chronic Brain Disorder—Syphilis)."

EACH case is preceded by a summary of the psychopathology and psychodynamics of the general syndrome exemplified in the vignette. Professor McNeil the teacher comes through in these introductions. He has given his readers a succinct and accurate statement of what clinicians know of the syndrome. In themselves, the syndrome summaries are mind-catching. They constitute an elegant abnormal psychology textbook.

The range of case vignettes, the inherent interest of each, the nontechnical language used, and the theoretical context provided by his introductions combine to carve out a special place for this book. Undoubtedly it will be read with profit by many people for whom abnormal psychology is a persistent interest. But its special place is to be found as an auxiliary text in undergraduate courses in abnormal psychology, adjustment, and those parts of elementary psychology that touch upon the extremes of personality functioning. (Medical students being introduced to psychiatry are also natural users of the book). McNeil's cases can make evident the continuity between normal and abnormal, the parts of each of us that when uncontrolled can result in grave

trouble, and can add the humanizing influence of real people to the descriptive theories of abnormal psychology.

A word about the illustrations for each case. They are attempts to represent the essence of the patients' problems. But they rely too heavily upon a direct translation of words into symbols. The artist, Edith Dines, has not suc-

ceeded in communicating in strictly graphic terms. McNeil has said it in his cases. The artist has tried to say it again (perhaps to enlarge our understanding) but she has simplified the cases to the point where there are raucous distortions of the reality and complexity of human life. Nothing to the book.

A Self-Made Straw Man

Arthur Staats

Learning, Language, and Cognition. New York: Holt, Rinehart & Winston, 1968. Pp. xvii + 614. \$9.50.

Reviewed by SAM GLUCKSBERG

Arthur Staats, the author, is Professor of Psychology and Educational Psychology at the University of Hawaii. He received his PhD from UCLA and has taught at Arizona State University. He is author with Carolyn Staats of Complex Human Behavior and editor of Human Learning: Studies Extending Conditioning Principles to Complex Behavior.

The reviewer, Sam Glucksberg, is Associate Professor of Psychology, Princeton University. His PhD is from NYU and he has taught at Harford Junior College. His research interests are in problem solving, concept learning, and cognitive and linguistic development. He is Associate Editor of American Scientist.

THIS BOOK is not merely an attempt to extend S-R principles to complex human behavior. It is also a vigorous argument for sweeping changes in research strategy, and for a novel and idiosyncratic view of theory construction. Staats's position is that "... an

adequate theory of learning of human behavior must abstract, integrate, and elaborate the "heavyweight" empirical principles of learning, cutting across theoretical lines, and then further elaborate the basic principles to show how complex environmental and behavioral events can become functionally related, in specific stimulus-response terms. This basic theory must then be extended to various realms of actual complex human behaviors in detail—which again means an S-R theory is required (p. vii)."

Staats is vitally interested in developing a technology of human behavior, and his strategy is to ignore controversial issues and to treat theoretical statements as facts, e.g., "stronger reinforcers . . . will produce stronger conditioning (p. 92)." He is explicit on the theoretical status of such facts. He treats them as laws of learning that are essentially beyond dispute, at least insofar as their relevance to human behavior is concerned. Presumably, this is what he means when he refers to them as "heavyweight" principles.

These laws of learning do not require explanation. Rather, the major task "... is to elaborate and employ the laws of learning as the higher-order laws to establish a theory of man's behavior (p. 580)." Thus, we should not use trivial laboratory tasks if we are interested in human behavior. Use of such tasks rests on the assumption that they tap underlying processes, and this assumption, Staats claims, is worthless. We should, instead, deal with "representative" behaviors, ... "the closer the sample of behavior is to an actual human behavior the greater the basic value of the study (p. 574)." When our concern is not specifically with human behavior, then two other levels of study within the basic field of learning are appropriate: those that deal directly with higher-order conditioning principles, and those that deal with derived S-R mechanisms.

How does Staats go about this enterprise, and how well does he succeed? In the November, 1964 issue of this journal, Donald Mason and Lyle Bourne reviewed Staats' *Complex Human Behavior* (Holt, Rinehart & Winston, 1963), written with Carolyn Staats. Mason and Bourne expressed dismay "... at times with the constrained and often oversimplified presentation of significant problems (p. 468)." I shared their dismay then, and I feel it now, and for the same reasons.

Staats relies primarily upon three general techniques to advance his argument that conditioning 'principles' account for virtually all complex human behavior. The first, and easily the most convincing, involves direct experimental studies of conditioning in complex tasks. For example, Staats presents a strong case for the conditionability of certain behaviors associated with words, such as GSR responses and affective ratings, drawing heavily upon his own inventive work. It is not terribly unreasonable to consider these data as evidence for the conditionability of some aspects of word meaning. Findings like these, however, are then extended via a second technique, postulating elaborate and ponderous chains of mediating stimuli and responses, without a shred of indepen-

dent evidence, to demonstrate that any selected behavior is accounted for by conditioning mechanisms. Denotative meaning, for example, develops by pairing words with their referents, which results in conditioned sensory responses, or images. The classic difficulties with such an image theory of meaning are simply not dealt with (e.g., what could the image associated with the word *loud* be like?).

One is tempted to characterize such theorizing as inferential typography, where upper and lower case letters, subscripts, superscripts, and arrows are used in lieu of data. One extraordinary example concerns the problem of how a child might produce a sentence he has never heard, such as *give him that blue car*. This sequence of words is treated as a set of two-word units: *give-him*, *him-that*, *that-blue*, and *blue-car* (p. 170). Each of these pairs, or associations, was formed when other sentences containing these pairs occurred, such as *it was in him that I put my trust*. This particular sentence provided the association between *him* and *that*, and other sentences provided the other 'necessary' associations. As Mason and Bourne pointed out in their review of Staats's 1963 book, the complexities of associations in learning serial lists preclude the naive belief that such smooth linear response sequences are formed. Similarly, recent work on intra-sentence word association patterns clearly demonstrates that these associations are not linear from left to right. Finally, this account of sentence production provides no mechanisms for the selection of the particular words uttered. To say that external and internal stimuli elicit and control verbal responses is to say very little indeed.

THE THIRD TECHNIQUE is the description, often anecdotal, of behavior training and modification. A sizeable portion of this sort of evidence is taken from Staats's intensive, and often ingenious, work with his daughter, as well as with other children. While this kind of evidence is suggestive and valuable, training success *per se* does not constitute unequivocal support for any particular theoretical position. First, chil-

dren have learned to speak, to read, and to count under a variety of theoretical points of view. Second, it is difficult to know exactly what relationships have been demonstrated in programs where the success of the training procedures is of primary concern. In this connection, Staats provides the most appropriate warning: "In general. . . methods, results and conclusions are intermixed to some extent. . . . The methods and procedures were variegated and it is not possible to cleanly separate procedures from results (p. 269)."

These three techniques are used in connection with an impressive variety of phenomena, including language learning, cognitive development, and social learning. Other approaches to these and to other phenomena are minimally considered. Linguistic and psycholinguistic, as well as information processing approaches, are summarily dismissed. Surprisingly, other S-R approaches are also ignored. For example, Berlyne's sophisticated attempt, *Structure and Direction in Thinking*, is not even cited. Thus, despite the range of topics included, Staats provides only the narrowest of treatments of those topics. The reader learns much more about how some hypothetical S-R mechanisms might account for selected, oversimplified phenomena than he does about the phenomena themselves, or about other potentially fruitful approaches to these phenomena. Ardent critics of S-R approaches in general need no longer construct their own straw men—Staats has provided them with one

The paradox of modern industrial motivation is that while material needs are being satisfied and even satiated, the lack of intangible rewards has become the newest and perhaps greatest barrier to productivity.

—SAUL W. GELLERMAN

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Developmental Brainstorming

Esther Milner. With Prefatory notes by R. W. Gerard, M.D.

Human Neural and Behavioral Development: A Relational Inquiry, with Implications for Personality. Springfield, Ill.: Thomas, 1967. 1p. xxv + 393. \$17.50.

Reviewed by DONALD B. LINDSLEY

The author, Esther Milner, is an Associate Professor of Education in the School of Graduate Studies, Brooklyn College of the City University of New York. She took her PhD under the Committee on Human Development of the University of Chicago. A clinically-oriented developmental psychologist, her interest tends to focalize upon personality and problems of social adjustment.

The reviewer, Donald B. Lindsley, is Professor of Psychology and Physiology, and a member of the Brain Research Institute, UCLA. He received his PhD from the University of Iowa in 1932 and has been awarded honorary degrees by Brown, Wittenberg, and Trinity. He has had a long-standing interest in brain organization and behavior and was a pioneer in the use of the electroencephalogram in the study of brain development in children, beginning in 1935. He currently has a large and active program for the study of electrophysiological correlates of attention, perception, and learning in man, monkey, and cat.

THERE has long been a need for a book that relates neural and behavioral development, in both man and animal. This need has become more acute with the rapid spread of multidisciplinary interest in brain and behavior interrelationships and with the recrudescence of experimental child psychology.

The period of the past forty years has witnessed a marked resurgence of interest in the study of the brain and nervous system as new methods and approaches, both to the brain and behavior, became available. Neurophysiology, and especially the electrophysiological probing of the brain of animals and man, has contributed a great deal to our understanding of the functional organization of the brain and has led to many interesting and promising concepts of its relationship to behavior.

It is in some of these that Dr. Milner became interested as she searched for a better neural understanding of social-psychological concepts underlying personality and its deviations. Starting with an inadequate background for the neural aspect of the task she has made herself acquainted with some of the older neurobiological literature and has waded through a morass of newly acquired neurophysiological data and concepts and has digested them surprisingly well. At times her enthusiasms kindled by her "discoveries" suggest an "Alice in Wonderland" attitude. On the whole, however, she has done a remarkably good job in dealing with an exceedingly complex task of bringing together certain neuroanatomical, neurophysiological, electroencephalographic, and psychological data and aligning them on a developmental base for human behavior in a manner that has never before been attempted.

It is funny how many things can get into a book that don't seem to belong there, contribute nothing to the main theme, and generally have a distracting, if not actually negative, value. This is nicely illustrated by Chapter I, entitled "The Human Nervous System's Potential Rapprochement and Theoretical Roles," whatever that means! What is in it is even more astounding: Perpetuation of the old chestnut or schism between those who perceive problems and carry them out with controlled and quantifying methods (referred to here as "comparative-experimental" psychologists) versus those who conceive of more wholistic personality-oriented problems in human beings. Curiously much of the neural conceptual framework upon which this book draws is based on animal work and furthermore it should be clear to anyone on the modern scene that our correlations between brain and behavior are going to be heavily dependent for some time upon animal experimentation, although every effort should be made to extend experimentation to human subjects where feasible. Milner's uneasiness about all of this suggests that somewhere in the bed is a paranoid thorn! In this same chapter I was amused to read, as I am sure Boring and Stevens would be, that their names have been linked with Lashley as *lonely neuropsychological pioneers*.

Certainly Chapters I and II are not up to the standard of the other chapters, and the Orientation Supplements 1-3, although containing generally helpful condensations of neural organization in table form, contain some errors and misconceptions, which is probably inevitable in such an undertaking.

ECHOING an old Darwinian shibboleth, "Ontogeny recapitulates phylogeny," Chapter III presents twenty phylogenetically derived principles, the last four said to be uniquely human. Chapter IV assesses man's neural system embryologically and relates it to the behavioral development of fetal life. Chapters V-VII, drawing heavily upon Hughlings Jackson, Herrick and Romer, but also Jasper, Penfield, and others, outline an hierarchical conception of

man's nervous system, its functional pattern of subsystems, and finally a triple-system comprised of an intraorganismic vegetative and feeling-tone subsystem, a transactional-perceptual subsystem, and the convergence of the preceding two in thalamo-cortical and reticular interrelationships called central integrating circuits. All of this may sound a bit forbidding, weighty and confusing for the neophyte to neural mechanisms, but it is put rather simply and clearly.

Chapters VIII-XI come to grips with the basic problem and search for developmental patterns by relating postnatal neural and behavioral development in text and tables, covering the age ranges: birth to two years, two to six years, and six to maturity. Chapter XII gives an overview of neural-behavioral development, said to be the second phase of the developing hypothesis launched in Chapter II: A tentative answer to "What happens during the developmental gap between birth and neural maturity"? Chapter XIII deals with implications for individual differences, for the role of mothering in human development, for personality theories and for further research. The last chapter deals with applications to social-cultural problems of contemporary nature.

ALL in all it is an interesting and daring book that should jar and decouple some engrams and hopefully start some reverberatory activity among cell assemblies. It is not another Hebb's *Organization of Behavior*, as alluded to in Ralph Gerard's prefatory notes, but Milner should be congratulated for her courage, effort and success in dealing with a field of vast and varied dimensions originally unfamiliar to her, and for perceiving and fulfilling a need by helping bridge the gap between neural and behavioral development.

Unfortunately, in the human realm to which this book addresses itself, there is relatively little neurohistological study of the developing brain from the time of Flechsig's pioneering studies in the 1890's until Conel's monumental works beginning in 1939 and now comprising seven volumes on the postnatal development of the human cerebral cor-

tex. Despite the fine contributions of Piaget, Buhler, Gesell, McGraw, Bayley, and others, and the systematic study of children in several large "growth studies" of the 1930s, there was, and still is, a lack of data on the temporal sequences of behavior that could be correlated with neural development. Furthermore structure of the developing brain is not enough; neurophysiology and electrophysiology are needed to round out the

functional picture. And now, perhaps even more, there is a dearth of not only information, but of techniques and competently trained scientists to investigate the temporal order of the neurochemical development of the brain. This constitutes the next important phase of analysis to be studied and correlated with the growth and maturation of the developing brain and associated behavioral changes.

The Do's and Don'ts of Social Interaction

Michael Argyle

The Psychology of Interpersonal Behavior. Baltimore: Pennington, 1967. Pp. 223. \$1.25.

Reviewed by HAROLD B. GERARD

The author, Michael Argyle, attended Emmanuel College and became University Lecturer in Social Psychology at Oxford in 1952. He has been a Fellow at the Center for Advanced Study in the Behavioral Sciences and Visiting Lecturer or Professor at the Universities of British Columbia, Delaware, Ghana, and Michigan. He is particularly interested in the experimental study of social interaction and its application to wider social problems. He is the author of The Scientific Study of Social Behaviour, Religious Behavior, and Psychology and Social Problems.

The reviewer, Harold B. Gerard, is Professor of Psychology at the University of California, Riverside. His PhD is from the University of Michigan and he has taught at the University of Buffalo and at NYU. He is author with E. E. Jones of Foundations of Social Psychology.

ALTHOUGH this book is very short, consisting of exactly 200 single

column paperback-size pages, this reviewer took forever to read it. A few pages of reading was all I could manage at any given sitting, since each time I was overcome by disbelief and indignation.

The foreword and preface prepare the reader for a scholarly work that would be useful to the serious student of social psychology. The book will be sorely disappointing to anyone who begins it with that expectation. A good part of the volume concerns itself with the do's and don'ts for winning friends and influencing people and is presented as though the author's prescriptions were based upon the good authority of systematic research. He says, for example, "it is possible to keep the other person in play simply by being agreeable and acting as the other person wishes, accepting his verbal conditioning, for example" (sic). At another point he states that, "a person who is flexible can get on with a wide range of other people. If he is *too* flexible he will

simply be accepting the situation on their terms, however, and will not be able to bring about the outcome he wants. So he should be flexible in the sense of reacting rapidly to the reactions of the other, but he need not necessarily do what the other wants. He is able to deliver other rewards and is able to influence the other in subtle and persuasive ways." Also, "the most effective way of projecting a self-image is to behave in accordance with it—'actions speak louder than words.'" In comparing motor skills with social skills he goes on to say that the practiced performer "is not anxious or bothered about his self-image, he can deliver his social techniques smoothly and effectively with regard to their proper timing and sequence, and he is perfectly in control of the whole situation." The chapter on social skills consists of a string of such empty prescriptions deriving, I suppose, from Argyle's intuition, in which the referents of such terms as flexibility are inadequately presented or not discussed at all.

THE VOLUME starts off with a rundown of the seven social motives: non-social drives that can produce social interaction, dependency, affiliation, dominance, sex, aggression, and self-esteem. This is a mixed bag to say the least. Lists of this sort went out of fashion a long time ago for good reason. Following McDougall, writers with lists typically present them as though the items in the list really exist and somewhere in the person there is a set of valves that can be turned on individually or in combination. Labeling drive states can be an absorbing pastime and such lists can get very long with some containing as many as 25 pseudo-distinct drives or instincts. The modern trend is not to worry over specific labels but rather to be concerned with conditions that arouse psychological tension and once aroused to study its vicissitudes. This is the way the study of motivation in social psychology has been going with the result that we now talk in terms of drive states such as uncertainty, dissonance, or imbalance and have forsaken the reification of valve-like models.

In the first chapter, Argyle makes outrageous statements and there is at least one example of an incorrect reference. In referring to an experiment by Schachter and Wheeler (1962), he describes an experiment by Schachter and Singer (1962). Now to some of the outrageous remarks. He says, as though it were a fact, "Whenever a drive is activated, physiological arousal occurs, though the feelings experienced and the behavior produced are specific to the drive." If there is one thing psychologists can be sure of it is that attitudes or drives do not necessarily yield behavior specific to that attitude or drive, that is, different specific behaviors can be triggered by the same kind of arousal and the same behaviors can be triggered by different kinds of arousal. Another example: "Arousal is stronger when the expected reward or 'incentive' is larger, when it is greatly desired, and when its probability of being attained appears to be greater." A good deal of recent research by the dissonance group and the motivational studies of Atkinson and his colleagues indicate clearly that Argyle's assertion here is absurd. Under certain circumstances low incentives appear to produce greater arousal than high incentives. Also, moderate probability of goal attainment seems to produce greater arousal than either low or high probability.

Further down the page, in discussing the origins of drives, he asserts that "sex, aggression, and affiliation also have an instinctive basis; in other words, all human beings have an innate tendency to pursue these goals when aroused." (1) He goes on to misrepresent the Harlows' (1962) findings by stating that monkeys reared without mother contact later showed little interest in the opposite sex. If he would bother to read the article he cites carefully he would find himself wrong on two counts. In citing Mason's work, the Harlows point out that the monkeys reared in isolation were not lacking in sex drive as "indicated by the fact that the males frequently approached the females and the females displayed part of the pattern of sexual presentation. But they did not orient themselves correctly and did not succeed in mating (p. 138)." In other words, they showed an interest but

didn't know what to do about it. The second count on which he is wrong concerns some of the Harlows' own work described in the same article in which they found that monkeys reared with peers in communal cages *without mothers*, but with terry-cloth surrogates, were able later to establish a normal sex life. These are examples of infuriatingly bad scholarship. There are many more.

He devotes a short paragraph to the measurement of motivation that must come as an affront to anyone familiar with measurement techniques. For example, he says that "the easiest means of assessment is by means of questionnaires, though these can only get at the conscious part of motivation, and errors are caused by subjects trying to present a desirable picture of themselves." For one thing, questionnaire measures have been used to get at so-called unconscious motives and furthermore problems of self-presentation are pervasive and not a problem peculiar to questionnaires. Besides, there are various ways of disguising questions. This theoretical chapter on motivation had me sputtering all the way through. It is a jumble of misstatements and platitudes.

THE one data chapter, on eye-contact research, makes an attempt to describe how the technique may be used to study aspects of social behavior. I suspect that it is a potentially powerful technique but there has not been enough research to date to tell for sure. Problem areas such as the determinants of attraction, social influence processes, and self-presentation would undoubtedly profit from the use of eye-contact data. Argyle's chapter is, in places, informative but conclusions such as "looking combined with a hostile expression means that A dislikes B or wishes to dominate him" leave me cold.

In the latter part of the book Argyle presents a once-over-lightly rundown of mental disorders and their interpersonal consequences in order, he says, to put the normal everyday exercise of "social techniques" into perspective. His discussion of various disorders is cursory and he ends up with such insights as "manics are aroused (socially) too much, depressives too little," "both

schizophrenics and psychopaths are poor at perceiving the emotional side of communications" and "do not form relationships with one another." Although his intention is worthy, these platitudes can hardly help illuminate aspects of social behavior.

He devotes a chapter to a description of proper social techniques in certain professions such as selling, interviewing, public speaking, and sensitivity training. Here again his effort boils down to do's and don'ts. Manuals written by experienced professionals are much more helpful. He offers no novel or useful insights that the perspective of the social psychologist might afford.

The entire volume lacks any form of intellectual bite and is written in a graceless style. It should be avoided as course material unless an instructor is intent upon giving his students a lesson in what social psychology can be at its worst. I have used it this way with success.

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Olfactory Hedonism

R. W. Moncrieff

Odour Preferences. New York: Wiley, 1966. Pp. 357. \$14.95.

Reviewed by RAND B. EVANS

The author, R. W. Moncrieff is a Chemical Consultant with a B.Sc., and is a Fellow of the Royal Institute of Chemistry, England.

The reviewer, Rand B. Evans, received a PhD under Karl Dallenbach from the University of Texas at Austin in 1967 and is now Assistant Professor at Wright State University. His special research interest is in sensory psychophysics, with an interest in auditory and olfactory psychology.

IN so neglected a field as is olfactory psychology almost any publication is worthy of note. When the work is combined with the field of affective reactions, the publication is particularly significant. In this exhaustive series of experiments, Moncrieff extends the kind of work P. T. Young was doing in the 1920's and early 1930's. About two-thirds of the book is concerned with these experiments on preferences for odors, both natural and artificial, by human observers. Analysis is then carried out in terms of individual differences. Particular emphasis is placed on difference in odor preferences due to age, sex, and temperament. Temperament is limited here to introversion-extroversion.

Moncrieff has divided the work into three parts. Firstly there is a search for trends, effectively a pilot study where 12 observers ranked 132 different odors in terms of preference. The second section is concerned with preferences for a few odors, 10 in all, by 500 observers. The data for the first two sections were analyzed to observe the difference in odor preferences with age, from childhood to old age; by sex; and with temperament. These experimental chapters exhibit a large number of facts, some quite surprising. It is not an easy matter to relate such a mass of information in an interesting way—and these chapters do become tedious. The pages of raw data do not help matters. In a book of only 357 pages, 52 pages of what can only be called raw data seem quite out of place. I can think of nothing these pages contain that is not exhibited far more succinctly and clearly in the many excellent graphs and histograms distributed throughout the book.

The third part of the book seeks to relate the findings of the first two

parts to the past literature. This section is somewhat larger than either of the experimental sections. It is a good review of the literature and ties the present data to the past well. Besides this, there are chapters on pleasantness and unpleasantness, on the classical systems of odor classification, on the preferences of animals, and on preferences for food, perfumes, and industry.

THIS is as much a source book as anything else, and it is packed with information. One original touch is the use of "Rules of Odor Preferences" that serve to summarize the chapters. There are 124 rules in all and they convey in a most succinct manner most of what we know about odor preferences. It is easy to lose one's sense of humor with rules of this sort, but if kept in proper context they are very helpful.

There is a healthy balance between new facts and old in the book and the assimilation of a great deal of material from diverse sources is evident in itself to justify both its publication and purchase. I would recommend *Odour Preferences* to anyone interested either in olfaction or to affective reactions. Further, not only food economists and perfumers should read the book but also experimental psychologists outside of the sensory field. It is about time experimental psychologists realize that there are other noxious stimuli than electric shock and other reward stimuli than M&M candies. Olfactory stimuli can serve in both contexts and this book is the best source available on how people react to various odors, or at least which are pleasant and which are unpleasant. The book will provide the stimulus for a wide variety of research, in and out of the sensory area, for anyone interested enough to read it.

It is unfortunate that the publisher has seen fit to overprice the book so tremendously. Not even the tired excuse of limited audience can justify such a price tag. The price will guarantee a limited audience.

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THE SIGN OF
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The Enigma of Secondary Rewards

Edward L. Wike (Ed.)

Secondary Reinforcement: Selected Experiments. New York: Harper & Row, 1966. Pp. xii + 566. \$13.75.

Reviewed by JUM C. NUNNALLY

The editor, Edward L. Wike, received his PhD from UCLA in 1952 and went to the University of Kansas on a one-year appointment. He's been there ever since except for a summer of teaching at UCLA. His research has been on drives and rewards, both primary and secondary.

The reviewer, Jum C. Nunnally, received his PhD from the University of Chicago, working with William Stephenson. He spent the next eight years at the University of Illinois, working in the area of measurement. He is now Professor of Psychology and Chairman of the Department at Vanderbilt University, investigating learned rewards in children and has also written several books on various aspects of psychological measurement.

WIKES has produced a useful book on an important topic. The book concerns theories and findings regarding the psychological processes whereby neutral stimuli acquire the properties of rewards. There is an overwhelming amount of everyday experience to indicate that neutral objects do indeed come to possess strong positive characteristics. An outstanding example is that of a man's fetish for collecting women's shoes. How could one possibly explain such highly motivated behavior except in terms of principles whereby neutral objects become learned rewards? There are many less dramatic examples of conditioned reward value, such as the

nostalgic reaction to the "old oaken bucket."

Regardless of their wide differences in other respects, nearly all theorists concerned with principles of learning and motivation heavily emphasize the importance of learned rewards in explaining complex behavior. Hull's now famous $r_g - s_g$ mechanism hung crucially on the assumption that neutral stimuli in proximity to rewards in the goalbox eventually come to function as rewards themselves. Skinner has spoken of powerful "generalized reinforcers," such as money, that through many associations with rewards come to serve as rewards themselves. Freud spoke of neutral objects as becoming "cathected" as stimuli eliciting the release of libidinal energy.

THIS is primarily a book of readings, with about 100 of the 516 pages devoted to introductory comments and concluding remarks by the author. Although some additional studies might have been added, if anything, the list of readings is too complete, in the sense that the book is encyclopedic to the point where cover-to-cover reading is rather tedious.

One cannot quibble with the quality of the readings that have been selected. There are classic articles from years past and articles dated near the time of publication. One sees among the various authors the giants of today and yesterday and numerous aspiring young people as well.

The book will be valued as a reference source by almost any graduate student or psychologist who has interests in learning and motivation. It is doubtful that the book will be used widely as a classroom text because there probably are no regular courses entirely concerned with the topic, and the book is too large and expensive to be used in most courses as supplementary material.

In his introductory comments Wike makes a strong effort to remain eclectic; this stance is fine from the standpoint of fairness, but sometimes leaves the reader vainly hoping for a solid point of view. For example, he intentionally does not supply the reader with definitions of the crucially important terms "secondary reward" and "secondary reinforcement;" rather he philosophizes about the nature of definitions.

Although Wike tries to be fair to all major theorists, he gives short shrift to the Skinnerian group, particularly in regard to testing for effects of learned rewards in the acquisition phase of operant conditioning. As the author clearly states, instrumental learning offers a messy situation in which to investigate the acquisition of reward value. For example, does the magazine click actually become a reward? Does it directly elicit the next response without actually having any rewarding properties, or does it merely activate the organism and thus increase the rate and vigor of the prepotent response? If one is interested in the mechanics of employing neutral stimuli to enhance rate of responding, then Skinnerians have amassed a huge amount of evidence and have come to some solid conclusions that are important for applied psychology. If, however, one is interested in *understanding* the effects of rewards on a variety of forms of behavior and how neutral stimuli come to function originally as rewards, then work in the Skinnerian tradition has not told us much.

WIKES discusses two other tests of learned rewards: (1) effects on extinction of learned responses and (2) effects on learning tasks that are quite different from the situation in which the reward value was acquired. Wike tends to dis-

miss the investigation of learned rewards in extinction trials, because there are so many different possible interpretations of the results. According to the discrimination hypothesis, the effect of the learned reward is to confuse the animal into believing that he is in acquisition rather than extinction. According to the response-elicitation hypothesis, the learned "reward" is not really a rewarding object but rather a classically-conditioned, direct elicitor of a response. According to theories of frustration, in extinction the learned reward serves mainly to influence the degree of frustration, which in turn governs the amount of competing responses. According to the most prevalent theory, which is an analog of classical conditioning, the secondary reward impedes extinction because the animal has learned to "like" the formerly neutral object. These and other processes probably play parts in all such investigations, and play such different parts in different experimental paradigms that it becomes impossible to untangle the processes involved. Also, in nearly all such studies to date, extinction has been very rapid for all treatment groups regardless of the presence or absence of a learned reward. This flies in the face of the heavy emphasis in most theories on relatively strong and durable learned rewards.

As Wike emphasizes, the most clear-cut evidence for the establishment of learned rewards in rats comes from investigations of the extent to which learned rewards promote new learning, e.g., establishing the secondary reward in a runway, then testing effects in a T-maze. Many of the articles report interesting findings, but more impressive is the weak, ephemeral nature of the effects. The secondary rewards employed in these situations are not nearly strong enough to motivate learning to a stringent criterion. A typical finding is that about 70 per cent of the responses during the early trials are toward the conditioned reward, and that the curve soon drifts back down toward 50 per cent.

The author bravely attempts to formulate a set of propositions that summarizes what is known about learned rewards. There is strong evidence to support some of these propositions, e.g., that principles of stimulus generalization

apply to learned rewards in essentially the same manner as they do to cues in discrimination learning. As the author freely admits, some of the other propositions are backed up by scant evidence, or must be accepted in the face of obvious contradictory findings.

ONE is left with a number of distinct impressions regarding the impact of the literature covered by Wike's book and by his own comments. First, the area of research has some severe semantic problems. For example, the author himself uses the terms secondary reward and secondary reinforcement as though they were nearly synonymous, but it is widely known that rewards are not always reinforcing and all reinforcement is not accompanied by obvious rewards. Second, if one wants to investigate the acquisition of rewards, qua "attractors," in the Thorndikian sense of the term, there probably are much better measures than any of those related to the reinforcement of simple instrumental motor responses or correct choices in discrimination learning. Third, the weak and sometimes inconsistent findings may be due to the animal investigated and the types of stimuli employed. Most studies have been with the white rat, which may be a poor animal indeed for investigating learned rewards. Also, most often investigators have employed visual stimuli as learned rewards, but rats are dominated so much more by olfaction than vision. Very striking results have been obtained in studies of chimpanzees, e.g., animals hoard the learned rewards. Recent studies of children have shown marked, consistent, and quite durable effects of learned rewards on measures of verbal evaluation, expectancy, choice behavior, and attentional mechanisms.

Wike has summarized what was known (circa 1963) about the psychology of learned rewards. He did it well, and his list of readings and his own comments point to new directions in research. On a different day, with different experimental paradigms and dependent measures, and perhaps with different types of animals, we might yet be able clearly to demonstrate and explore learned rewards, a phenomenon that both common sense and nearly all major theories of

learning insist is an important determiner of behavior.

Assorted Stimuli about the Stimulus-Deprived

Charles A. Brownfield

Isolation: Clinical and Experimental Approaches. New York: Random House, 1965. Pp. xli + 180. \$1.95.

Reviewed by DONALD W. FISKE

The author, Charles A. Brownfield, is currently a school psychologist, on leave of absence from Nassau Community College where he is Assistant Professor of Psychology in the Department of Psychology, Sociology, and Philosophy. He has been a clinical psychologist in various institutions and holds an MS in general psychology from Western Reserve University. His interest in isolation stems from his undergraduate days.

The reviewer, Donald W. Fiske, a University of Michigan PhD, is Professor of Psychology at the University of Chicago, and until recently Associate Chairman of the Department. His interests have gone from variability in responses of individuals to such variability as a source of new stimulation and to the need for varied experiences. He has written, with Salvatore Maddi a book, *Functions of Varied Experiences*.

WHEN DOES a substantive area become sufficiently mature to merit a textbook of its own? Has the topic of isolation, likened by Brownfield to an ungainly adolescent, reached the age of reason and independent livelihood? Or perhaps age is not the determiner: perhaps a topic has an independent existence from its conception.

As conceived by the author, the area of isolation is broad. The extensive bibliography, including many references outside the academic domain, provides good coverage up to the year before the book's 1965 publication date. The author successfully accomplished his intention of sketching the many phenomena he sees as relevant. His other purpose was to write a beginner's book that would entertain. Here again he succeeded: the casual student will find much of interest in the first part on "The Psychopathology of the Solitary Mind" though somewhat less in the remainder on "The Scientific Approach: Experimental Isolation."

The book is reminiscent of the travelogues seen among the "Selected Short Subjects" at the movies of two decades ago. It has the local color and the panoramic views. The close-ups are for the public, seeking passive entertainment, rather than for the scholar or researcher. While providing details about the experimental conditions and the findings of a few studies, the author's lens is more often wide-angle than telescopic. He fulfilled his hope of sparing the reader from wading through the mass of detail—in which many might prefer to be immersed.

Set before the reader is a Smorgasbord, offering Herodotus, Thoreau, and Mao Tse-tung on one side and, on the other, Hebb, Harlow, Mackworth, Broadbent, and others from Azima to Zubek. But is this a meal? Brainwashing and shipwreck, feral children and isolation therapy, experimental confinement and sensory restriction—the diet is rich. At the same setting, does the reader want to know that "Civilization is an ongoing attempt to dispel man's basic sense of loneliness . . ." and that responses in sensory deprivation studies may be influenced by numerous and variegated variables associated with subject, experimenter, and situation?

While the book has a little for everyone, the curious layman will be the more satisfied reader. The scholar will be frustrated by the author's unwillingness to take a stand. Rarely engaging in intensive critical discussion, he sometimes lets others summarize for him. And the scholar should be wary: he should be warned that the author must have an

extreme score on that cognitive style called category width, lest the reader have the reviewer's experience of searching a cited article in vain for the textual reference implied by the inclusion of a reference in one of the author's more lengthy lists of pertinent papers. In one instance, perhaps misled by a secondary source, the author mentions discriminations by rats in different compartments of a learning apparatus and gives as a reference a study of "stall perception" in subjects the actual investigator insists were aviators. Fortunately, there are other reviews available to the scholar so he can leave this book to the uninitiated for whom it was written.

Psychiatry, Society, and Crime

Seymour L. Halleck

Psychiatry and the Dilemmas of Crime: A Study of Causes, Punishment and Treatment. New York: Harper & Row (Hoeber Medical Books), 1967. Pp. xiv + 382. \$10.95.

Reviewed by GILBERT GEIS

The author, Seymour L. Halleck, is Professor of Psychiatry at the University of Wisconsin Medical School. He has also served as staff psychologist at the US Medical Center for Federal Prisons, Springfield, Missouri, and has been resident psychiatrist at the Menninger School of Psychiatry.

The reviewer, Gilbert Geis, is Professor of Sociology, California State College, Los Angeles. He is co-author of Man, Crime, and Society, Juvenile Gangs, East Los Angeles Halfway House, and Longest Way Home. He is editor of the forthcoming White-Collar Criminal. He is also Consultant for the

President's Committee on Law Enforcement and Administration of Justice.

LARGELY through the operation of squatter's rights, the subject of criminology in the United States almost exclusively has been centered within the sociological realm. The word "criminology" itself, however, is a corruption of "criminal anthropology," indicating the focus of early work in the field. In most European countries today, criminology is housed in law schools; in Latin America, it is likely to be found in medical faculties. Not surprisingly, the academic site of criminology tends to lend a parochial air to its study and theory.

In the United States, sociological criminology has been particularly hostile to psychiatric writings on criminal behavior. Such writings are generally susceptible to caricature, especially when psychiatrists describe what they believe to be the symbolic basis of criminal acts. In addition, psychiatrists have tended to concentrate attention on issues of responsibility, where their paid adversary testimony, and the badgering they often take from adept attorneys, are apt to make them appear rather graceless.

In such terms, the Halleck volume provides refreshing counterbalance to the usual sociological myopia regarding other than sociological explanations of crime. In particular, Halleck has learned well the lessons of the Szaszian dispensation, and he is both astute and decent in weighing the interests of society against those of the individual as psychiatry is called upon to adjudicate such matters. He is also sensible and fair in avoiding blanket categorization of all criminal behavior as unreasonable human activity, and in walking the tight-rope between the medical obligation to make an individual more comfortable, even if that comfort includes continued criminal behavior, and the social demand for protection, even if such protection involves hobbling a seemingly reasonable, but criminal, human aspiration.

THIS is not to say that Halleck's book, however refreshing and boundary-

breaking, manages to fuse sociological and psychiatric views of crime into a coherent amalgam. For one thing, the volume is choppy and selective. The problem of sexual psychopathy, for instance, a psychiatric pet, gets elaborate attention; among many others, the issues of burglary and forgery, numerically and probably intellectually more important matters, receive short shrift. In addition, much of the early part of the book restates basic psychiatric theory, well-jargonized, with only stray attention to the relevance of such theory to criminal behavior. Nor can the author resist overlong the attempt to "prove" his ideas with case histories, many of which demonstrate only the remarkable ability of psychiatry to explain both the congruent and the contradictory with the same postulate.

The second half of the book, dealing with psychiatry in the court and the correctional process, is a good deal more sophisticated. There is admirable sensitivity on Halleck's part to issues of freedom, and decent grappling with complex questions involved in psychiatric judgments leading to incarceration and hospitalization and retention in such status.

The least attractive element of the book, however, must be its almost single-minded disinterest in empirical work, and its general assumption that controversial issues may readily be resolved by intelligence and clinical intuition. To take but one of endless possible illustrations, mention can be made of Halleck's discussion of a Wisconsin procedure that permits prolonged institutionalization of sex offenders diagnosed as potentially dangerous. That such diagnoses might be monitored by experiment, that variations in procedures might be checked and researched, that work in other jurisdictions might be examined to provide sound, quantitative information is not really within Halleck's ken, though he obviously is aware that such data would be useful. This lack of empirical commitment seems particularly unfortunate, because Halleck's book shows a keen mind at work, flexible and questioning, and the work could have been a much more striking contribution.

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A Sampler of Counseling and Psychotherapy

Dugald S. Arbuckle (Ed.)

Counseling and Psychotherapy: An Overview. New York: McGraw-Hill, 1967. Pp. 231. \$6.95.

Reviewed by MARTIN J. BOHN, JR.

Dugald S. Arbuckle, the editor of this volume, received his PhD from the University of Chicago and has been at Boston University since 1947. He is Professor of Education. He is author of *Counseling: Philosophy, Theory and Practice* and of *Counseling: An Introduction*.

The reviewer, Martin J. Bohn, Jr., received his PhD from the University of Iowa. He has taught at Washington University, and has been visiting professor at the University of Alaska and at Iowa State University. He is currently Assistant Professor of Psychology and Education at Columbia University and an Associate in the Psychological Consultation Center at Teachers College. His research has been in the area of counselor personality and behavior, and in vocational development and personality. He is collaborating with Donald Super on Occupational Psychology.

IN these times of mushrooming theories of counseling and psychotherapy, it is increasingly difficult for a person to get an overview of the entire field. Recent books in this area have generally been cast in one of two prevalent molds. First, one or two authors attempt to present the major theoretical positions in a manner as objective and clear as possible (e.g., Ford & Urban; Patterson). Second, an editor collects the

writings of experts from different persuasions permitting each proponent to make the case for his own approach (e.g., Steffire). *Counseling and Psychotherapy: An Overview* follows the second format and brings together an impressive group of writers.

Feeling that a believer can best present a given position, Arbuckle selected this group of authors on the basis of their commitment and leadership in particular areas of counseling and psychotherapy. With varying degrees of personalization, these writers discuss counseling issues within the context of their own specializations. In response to the presentations, Arbuckle reserves for himself the privilege of commenting on each chapter and the responsibility of providing an overview of the overview. To his credit, the editor does not attempt to picture himself as an atheoretical, unbiased commentator; rather he responds in a manner consistent with his own, stated frame of reference, based on a "... forward-looking, existential client-centered concept of man as a free, self-evolving, and self-actualizing Being . . . (p. 19)."

The presentations by the various authors can be ordered along a continuum something like practitioner-scientist. Immediately on the heels of the Arbuckle existential client-centered introduction, Adrian van Kaam extends

the existential approach. Arbuckle chides van Kaam for bringing to the counseling relationship certain preconceived notions of how the client should behave and perhaps for being too open to this effort to be with the client. Charles Curran then follows van Kaam and presents a position that is more relaxed and less humanistically existential. A thought-provoking aid to understanding is Curran's comparison of the counselor relationship with the relationship between man and God. (The client is man; the counselor is God.)

In discussing Rationales in Psychotherapy, Albert Ellis surprises and Arbuckle, as might be predicted, responds that Ellis should attend more closely to the relationship side of counseling. A different view of the counselor is presented by Richard E. Felder who writes very personally about self-involvement in counseling. This chapter has the interesting feature of having been written and set aside for a number of years. When Felder returned to his original work, he found that he believed even more strongly than when he had first set down his feelings.

THE first four chapters (including the introductory one) have a consistent orientation toward the practice of counseling and the presentation of views from individuals who are actively involved in that pursuit. The flavor of the rest of the book is more abstract and academic. Robert P. O'Brien writes of counseling and vocational psychology largely from his stance as an academician, structuring vocational counseling within the context of an individual learning about himself. This chapter illustrates again the difficulty in explaining vocational counseling from a first hand basis.

The concern of C. H. Patterson's chapter is the role of the counselor in the school system. By this point in the book, the practice of counseling *per se* is mostly taken for granted.

Discussing counseling and personality theory, Ted Landsman writes a difficult and rewarding chapter that traces the history of personality theory and its interaction with counseling. He concludes that these two areas will continue to af-

fect each other, hoping that counselors will play an even more active role in future development of personality theory. This hope strikes the reviewer as both laudable and somewhat unrealistic.

In the next to last chapter, Allen E. Bergin presents a scholarly review and organization of recent counseling research. Accommodating both his history in the Rogerian tradition and his present interest in behavior modification, Bergin points to the past achievements of Rogerian empirical test of counseling formulations and to the present dominant position of the behavior modifiers in their pursuance of empirical (if simplistic) tests of their positions.

Finally, Arbuckle concludes the volume with a summary reaction to the entire book, discussing the common threads that weave through the chapters. Such topics as the "nature of man," "freedom," etc., are useful dimensions for comparing and contrasting the presentations of the different authors. In his concluding remarks, Arbuckle seems less intent on uniting these diverse positions. Although still striving for unity, he is resigned to the fact that there are some positions that simply cannot be reconciled.

As a single volume, this book falls heir to the usual strengths and weaknesses of an edited collection. The style of writing is understandably different from author to author, demanding a certain amount of adaptation on the part of the reader. For example, chapter organization varies from individually labeled paragraphs of less than a page to paragraphs as long as 7 pages. Arbuckle's comments, which for the most part are written in a consistent, balancing manner, are not enough to maintain a smooth flow from the beginning of the volume to the end.

The book itself will serve well the audience for which it was intended: teachers of counseling and psychotherapy, and practitioners. In a short volume it presents first hand impressions of leaders from a variety of theoretical approaches, with informed responses by an expert in the field. The scope of the volume and the omission of some systems make the title somewhat misleading.

Rather than the overview aimed for, this volume might be more accurately called a "sampler of counseling and psychotherapy."

Dropping out of College: Failure or Fulfillment?

Lawrence A. Pervin, Louis E. Reik, and Willard Darymple
(Eds.)

The College Dropout and the Utilization of Talent. Princeton, N. J.: Princeton University Press, 1966. Pp. viii + 260. \$6.90.

Reviewed by ALEXANDER W. ASTIN

The first editor, Lawrence A. Pervin, has a 1962 PhD from Harvard and was formerly Assistant Professor of Psychology at Princeton. As of September 1 he became Associate Dean of the College and Associate Professor of Psychology at Rutgers University. The second editor, Louis E. Reik, received his MD from the University of Pennsylvania School of Medicine and is a Diplomate of the American Board of Psychiatry. Since 1953 he has been Director of the Mental Health Service at Princeton University. The third editor, Willard Darymple, received his MD from Harvard and has worked in the University Health Service at Harvard and M. I. T. He is currently Director of the University Health Service at Princeton.

The reviewer, Alexander W. Astin, spent the last year at the Center for Advanced Study in the Behavioral Sciences. His PhD is from the University of Maryland and he has worked for the National Merit Scholarship Corporation. He is currently Director of Research, American Council on Education. Since 1960 he has been doing longitudinal research concerning the impact of college

environments on student development. He is author of *Who Goes Where to College and The College Environment*.

THIS BOOK comprises eleven chapters prepared by participants in a conference on the college dropout held at Princeton University in October 1964. The chapters are highly variable both in content and method, ranging from long-term, quantitative followup studies to clinical analyses of individual case histories. These diverse points of view are "brought together with the object of clarifying rather than simplifying the complex phenomena involved" (p. 237).

For the research-oriented reader, the first half of the book is likely to be more interesting than the second half. This first section includes a provocative exposition by Kubie of certain theoretical issues related to dropouts, a detailed analysis by Pervin of two long-term longitudinal studies, and an insightful review of theoretical and methodological problems by Knoell.

In their interesting summary of dropout research at Penn State, Ford and Urban next report several administrative and curricular changes that were accompanied by a steady decline in the number of dropouts. Although their results are impressive, it is difficult to determine whether the decline was caused by changes in the curriculum, modifications in the academic calendar, revised admissions policies, new instructional techniques, an intensified counseling program, or some combination of these and possibly other factors. For example, since the decrease was primarily in the proportion of academic dismissals (the proportion of voluntary withdrawals changed only slightly during the same period), one might argue that the results were attributable largely to changes in admissions policies, and that the environmental changes made very little difference in the student's decision to drop out. Such ambiguities will not be resolved without better controlled studies.

THE second half of the book is devoted primarily to psychodynamically-oriented discussions written by clinicians. One of the more interesting of

these theoretical excursions is Shafer's analysis of "talent as danger." He points out that some students may unconsciously avoid performing well because achievement may symbolize destructiveness, competition, or even exhibitionism. For other students, using their intellectual talents may in turn lead to social isolation that is threatening enough to deter them from continuing in school.

The positive (or even therapeutic) consequences of dropping out of college are stressed by practically every author. Indeed, this emphasis is so strong in some of the chapters that the reader may wonder what the fuss over dropouts is all about anyway and why even more students should not be encouraged to leave college. The problem here seems to be that the reasons for the social concern about dropping out—the loss of talent, the waste of limited educational resources, the vocational and personal setbacks resulting from impeded career development and from the futile expenditure of time and effort—are given relatively little emphasis.

Despite the editors' attempts to bring about some rapprochement between the idiographic-clinical and quantitative-empirical analyses of the dropout problem, the gap between these two approaches remains large. This difference in method would seem to be caused in part by a fundamental difference in objectives: whereas the quantitative investigators are primarily concerned with the prediction and control of dropout behavior on an actuarial basis, the clinical investigators are primarily concerned with developing a theoretical frame of reference that can be applied in their therapeutic work with individual dropouts. Thus, dropping out of college is viewed by the statistically-oriented investigator as a socially undesirable event that ought to be avoided either through more judicious selection procedures or by means of environmental interventions of various sorts (counseling and advising, curricular or administrative changes, etc.). These objectives are to be achieved through a greater understanding of personal and environmental factors (and their interactions) that affect dropping out. The clinically-oriented investigators,

on the other hand, are not equally willing to make the same negative value judgment about dropping out. On the contrary, dropping out is viewed primarily as a symbolic act, the significance of which can be judged only in terms of the total psychological make up of the individual. It would appear that these basic differences in approach will not be reconciled in future research until some means can be developed for differentiating operationally between the "good dropouts" and the "bad dropouts."

Readers who are interested in clinical analyses of possible etiological and psychodynamic factors in dropping out of college are likely to find many of the chapters of interest. Readers who wish to increase their understanding of institutional and other environmental factors that influence the students' decision to drop out, however, are likely to be disappointed. Thus, in spite of the great diversity among institutions in their environmental characteristics, the possible role of environmental factors cannot be adequately evaluated because most of the empirical studies reported in the book were conducted at single institutions. Furthermore, the sample of institutions represented by these separate studies (Illinois, MIT, Penn State, Pennsylvania, Princeton, and Yale) is not diverse with respect to such potentially important dimensions as size, selectivity, curriculum, type of control, sex of student body, geographic region, etc. In their introductory chapter the editors do allude to evidence showing that there are wide variations in the dropout rates of different institutions, but no analysis of possible causal factors in the college environment is presented.

In short, this book represents a well-edited collection of papers covering a wide-ranging series of problems related to the college dropout. While the book as a whole may hold more interest for the clinician than for the researcher, the review and discussions of research problems contained in the four opening chapters are recommended reading for anyone interested in the systematic study of college dropouts.

Self Hypnosis

Klaus Thomas. Preface by I. H. Schultz

Praxis der Selbsthypnose: des autogenen Trainings: Formelhaft Vorsatzbildung und Oberstufe. Stuttgart: Georg Thieme Verlag, 1967. Pp. vii + 90. DM 9,80.

Reviewed by S. DONALD BABCOCK

The author, Klaus Thomas, has studied theology, philosophy, sociology, psychology, and medicine. The University of Berlin awarded him a PhD in 1943 and The University of Marburg an MD in 1947. Currently, he is a recognized religious leader, student advisor, and medical psychotherapist. He is recognized primarily for his work in Autogenic Training and important papers on suicide.

The reviewer, S. Donald Babcock, received his PhD in clinical psychology at the University of Tübingen, Germany. For the past fifteen years he has taught the method of autogenic training to his therapeutic patients and to individuals and small groups for physiological conditioning and personality modification. His current position is Chief of Clinical Services of The Training School, a unit of The American Institute for Mental Studies.

ONE can not speak of Klaus Thomas's work, *The Practice of Self Hypnosis by Autogenic Training*, without including discussion on the parent work of Prof. J. H. Schultz. The present small pocket manual is meant as a guide for the teacher of the autogenic training method. This technique was developed and formulated earlier in Schultz's book *Autogenic Training*. The author carefully states that this guide is not intended to replace the more complete presentation but is intended as a companion handbook and working reference for the teaching of self hypnosis to

individuals and groups. This soft cover booklet was prepared for professional mental health workers and is to be used in therapeutic settings. Thomas recommends the reading of Schultz's original work, obtainable in the English language under the title of *Autogenic Training: A Psychophysiological Approach to Psychotherapy*. (Grune and Stratton, New York, 1959, co-authored by Wolfgang Luthe.) Please refer to this reviewer's comments in *Contemporary Psychology*, September 1960, 5, 278-279.

THE technique of autogenic training is basically self conditioning through a self hypnotic training program. The lessons as formulated by Thomas are clear, practical and easily understandable to the participant-trainee. The step-by-step progression is carefully designed for rapid and positive learning. The entire course is divided into two parts. The first section has been termed the Standard Exercises and these are gauged to physiological conditioning, such as induced relaxation, temperature change, regulation of breathing and heart beat, etc. The second section is called the meditative series which serves psychic conditioning, beginning with, for example, visual imagery and progressing finally to perception of abstract values. Once proficiency is obtained, suggestions can be self-presented to modify present functioning. The author has prepared an excellent addition to the book shelf of every psychological or medical therapist. The charm of this technique and the application will become readily apparent to the reader. Hopefully this valuable contribution will soon be available in English.



Our clear concepts are like islands which arise above the ocean of obscure ones.
—G. W. v. LEIBNIZ (1646-1716)



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Where Life is More Terrible than Death

Paul Friedman (Ed.)

On Suicide: With Particular Reference to Suicide among Young Students. (Discussions of the Vienna Psychoanalytic Society—1910) New York: International Universities Press, 1967. Pp. 141. \$3.00.

Reviewed by J. CHORON

The editor, Paul Friedman, is a practicing psychoanalyst and a member of the New York Psychoanalytic Society. He is a member of the attending staff of Mt. Sinai Hospital, New York City, and an Honorary Member of the American Association of Suicidology.

The reviewer, Jacques Choron, received his PhD from the University of Leipzig and a DSSc from the New School for Social Research. He spent 1965-66 as Fellow of the Los Angeles Suicide Prevention Center and was formerly Staff Lecturer at the New School. Currently he is a Visiting Fellow at the Center for the Study of Suicide Prevention, NIMH. He is the author of *Death and Western Thought and Modern Man and Mortality*.

THE MAIN BODY of this volume consists of the minutes of the 1910 meeting of the Vienna Psychoanalytic Society devoted in its entirety to suicide, particularly that of adolescents. Belated as it is, the appearance of the English translation could not be more timely, in view of the revival of interest in suicidal behavior and suicide prevention. Edited and provided with an illuminating foreword by Paul Friedman, MD, PhD, these discussions have more than a purely historical value. What makes them particularly relevant today is the paradoxical situation that while psychoanalysis has become over the years the most widely used form of psycho-

therapy, the majority of its practitioners not only show surprisingly little interest in the problem of suicide, but are extremely reluctant to deal with suicidal patients. Friedman, himself a laudable exception in this respect, hints at this state of affairs when he notes that "unfortunately, psychoanalytic findings on suicide reached a standstill in the past quarter century." In reminding psychoanalytically oriented therapists that the founder of psychoanalysis, as well as his earliest and closest associates, were deeply concerned with the problem, the publication of the proceedings at the 1910 symposium "On Suicide" might stimulate them to become acquainted with the ways of dealing with suicidal persons, and thus contribute significantly to the task of suicide prevention.

THE PRINCIPAL SPEAKER at the Vienna symposium was the well-known teacher of classical languages, Professor David Ernst Oppenheim, coauthor with Freud of *Dreams in Folklore* (1911). He stoutly defended the educational system against the accusations leveled against it in connection with the allegedly alarming increase in suicides among Austrian high school students. Freud, however, felt that the school cannot be completely exonerated because of the important role it plays in the child's emotional development. Somewhat sarcastically, he added that

in any case "a secondary school should achieve more than not drive its pupils to suicide. It should give them the desire to live. . . ." Of much greater importance than the above exchange are the comments made by the other participants of the symposium. Although each speaker was drawing on his own experience with suicidal patients—and therefore the views expressed varied considerably—there was a remarkable unity, as far as the basic approach to suicide was concerned. In essence, it is the position already taken by Freud, who, as early as 1827, emphasized the psychogenic character of suicide. This view, however, was soon lost sight of, partly because of the new developments in psychiatry with its emphasis on organotoxic origin of psychic disturbances and partly because of Durkheim's sociological approach to the problem of suicide.

At the 1910 symposium we find various refinements of the psychogenic view of suicide inspired by Freud's discoveries, and some of these ideas were, in Friedman's words, "quite revolutionary at the time." Among these, he cites psychosexual crises and psychosexual conflicts as causative factors in suicide, and the assertion of Stekel that love is the main prophylactic against suicide, since, according to him, "those who have given up all hope for love kill themselves. The two most prominent discussants at the symposium were (aside from Freud) Adler, who presided, and Stekel. The former presented a view of suicide based on theories expounded in his book, *Organic Inferiority and its Psychical Compensation*. He suggested that "Suicide and neurosis are both childish forms of reaction to a childish overestimation of motivations, humiliations and disappointments . . . Suicide represents—like neurosis and psychosis—an escape by anti-social means from the injustices of life." But it was Stekel who, according to Friedman, made the most momentous and bold contribution in stating that "No one kills himself who did not want to kill another or, at least, wish death to another."

MANY of the views advanced during the 1910 symposium have since been

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accepted as essential to the understanding of suicidal behavior. No less important perhaps was the fact that the emphasis on the psychogenetic origin of suicide shows, for the first time, a way toward a potentially effective treatment of suicidal persons, and thus makes suicide prevention a real possibility. As long as self-destruction was thought to be caused by cosmic factors, or rooted in some organic pathology, its prevention would have been inconceivable, or extremely unlikely. Even the Durkheimian view of suicide is scarcely more optimistic as far as prevention is concerned. For, although according to him, inclination toward suicide differs from group to group, it remains practically the same for each group for long periods.

In this connection, it would seem appropriate to say a few words about the latest developments in the field of suicide studies and prevention in this country. Here the names of Karl Menninger, Louis Dublin, and of the late Gregory Zilboorg have to be mentioned for their pioneering efforts. But the first really concerted and large-scale program of research was initiated in 1958 in Los Angeles where a Suicide Prevention Center was organized by Drs. Edwin S. Shneidman and Norman L. Farberow under a grant from the U. S. Public Health Service. Scores of papers on all aspects of suicidal behavior have been published by the above-named co-directors of the Center, its chief psychiatrist, Dr. Robert Litman, and members of the staff. Three books, in particular, edited jointly or singly by Shneidman and Farberow, *Clues to Suicide* (1957), *The Cry for Help* (1961), and *Essays in Self-Destruction* (1967), constitute basic texts for any students of suicidal phenomena.

Partly as a result of the achievements of the Los Angeles Center, the National Institute of Mental Health in 1966 established a "Center for Studies of Suicide Prevention." Its main objectives are the dissemination of information regarding suicide, and the promotion of research and training, not only of specialists in suicide, but also of clergymen, nurses and social workers. In March of this year, on the initiative of Shneidman, the First Annual National Conference on Suicidology was convened in Chicago. Its highpoints were the establishment of the American Association of Suicidology, and a symposium, which sought to evoke the spirit of the Vienna

meeting. There, an attempt was made to assess the progress made in the understanding of suicidal behavior during the last 58 years. It became apparent that some of the seminal ideas advanced during the Vienna discussions had been revised and their universal validity questioned. A case in point is Stekel's theory of suicide with its overemphasis on the similarities between murder and suicide which must be replaced with a more balanced view which takes into account, also, the dissimilarities between them.

As to Friedman's introductory survey of the nineteenth century works on suicide, as well as Freud's theories on the subject subsequent to the 1900 symposium, it is regrettable that he limited himself to "Mourning and Melancholia" (1917), and does not mention at all his theory of the death instinct. After all, Freud himself considered it to be essential to the deeper understanding of suicide in addition to the interjected conflict between the motivation to kill a lover and his object, and the guilt resulting from

At the present time, in addition to two psychoanalytic points of view (one involving the death instinct and the other ignoring it), a broad spectrum of theories confronts the students of suicide: the Jungian, the Adlerian, the Sullivanian, as well as that of Horney, Kelly and Diamond. That each of these theories implies its own therapeutic approach, is obvious. But, as Farberow notes, "although there is not one kind of treatment that could be selected and singled out as appropriate for all suicides, there is considerable agreement as to the general lines along which therapy would proceed." (*Cry for Help*, p. 319). These lines, in a very general sense, have their roots in the ideas first presented at the 1910 symposium. To have made these accessible to the English-speaking reader is not the least of Friedman's contributions to the study of suicide.



*One may be a blameless
bachelor, and it is but a
step to Congreve.*

—MARIANNE MOORE



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No Treat in This Treatment

Max Hammer and Arthur M. Kaplan

The Practice of Psychotherapy with Children. Homewood, Ill.: Dorsey, 1967. Pp. xiii + 294. \$7.00.

Reviewed by DAVID FREIDES

The first author, Max Hammer, received his PhD under Robert Rosenthal from the University of North Dakota. He then spent a two-year internship at the Merrill-Palmer Institute. He is Director of Houlton Mental Center, Houlton, Maine, and Lecturer in Psychology at the University of Maine. The second author, Arthur M. Kaplan, received his PhD in child development under Alfred Baldwin at Cornell University, has taught at Washington University Medical School, and has been director of the Eastern Maine Guidance Center. He is now Head of the Psychology Department at the University of Maine.

The reviewer, David Freides, received his PhD under Logan at Yale University and has been at the Lafayette Clinic in Detroit. He is now Associate Professor in the Department of Psychology at Emory University. He describes himself as a clinical, clinical psychologist who feels at home with basic research and experimental psychology.

THE TITLE, preface, list of contributors, and table of contents indicate a "how to" emphasis written for practitioners by experienced hands. There is an introductory theoretical chapter by the editors, eight individually authored chapters, each devoted to the treatment of a class of disorders, and one more about the treatment of an age group—

adolescents. The theoretical orientation is deliberately limited to psychoanalysis. Despite multiple authorship the book is remarkably uniform in approach and quality.

Two quotations seem to epitomize the formal qualities and contents of the book. In the theoretical chapter, Hammer and Kaplan point out that play *per se* is not therapy but a means of communication and expression in the context of a relationship. They then go on to warn of play's regressive potentialities. "All play can probably be traced back to the original play with the erotic polymorphous perverse body. Toys represent substitutions of our body parts, and playing with toys is essentially masturbatory in nature for it represents unconscious playing with our own eroticized body" (p. 11).

This is an especially giddy sample of the posture maintained consistently throughout the book. It reflects a variety of psychoanalysis promulgated at the turn of the century and vulgarized during the thirties. The emphasis was on unconscious processes, the polymorphous perversity of impulses, and the origins of the ego in conflict. Treatment was conceptualized as making the unconscious conscious. The issues and data *within* psychoanalysis that led to changes in this version of theory and practice are not reflected here even though some are now more than thirty

years old. Such developments as Hartmann's conflict-free sphere of the ego, Kris's regression in the service of the ego, or Anna Freud's notions regarding developmental lines are not for evidence. To be sure, the book's bygone picture of psychoanalysis may be a view shared by many psychologists but there is no justification for inadequate scholarship.

The book is also burdened by the weaknesses and rituals commonly seen in psychoanalytic literature. Readily found are such stigmas as lavish citations to Freud that are more frequently name-dropping than exact, cavalier disregard of the psychoanalytic literature, confusion of observation and theory, and the tacit, implicit assumption that there is an ideal form of therapy—couch psychoanalysis—and all other efforts are but the best approximations.

THIS *a priori* value hierarchy regarding technique stifles innovation. Psychoanalytic conceptions dictated in the data yielded by the technique of free association and other aspects of classic psychoanalytic treatment. These data supported theory that located the origins of pathology in childhood. However, the classic means of study are largely inappropriate for the immature. Since intervention during development is logically superior to awaiting maturation and eligibility for psychoanalysis, it would seem that the practice of child psychotherapy inherently would challenge the primacy of classical analysis as an ideal intervention procedure. This confrontation appears to be an important source of change at the boundaries of current psychoanalytic thinking. The book, however, neither deals with this question nor reflects this tension. When the encounter with a specific kind of pathology dictates modification of technique (delinquent adolescents, autistic children), the communication is hesitant, apologetic, and unreflective.

A second quotation that seems to characterize this work is found in a discussion of the functions of the therapist in Peter Knowlton's chapter on the autistic child . . . "the child may be seen with the mother or without her, in the psychiatrist's office, or in the nursery—

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personal Attraction, Hostility and Perception"); Ellen Berscheid, University of Minnesota, and Elaine Walster, University of Wisconsin ("Attitude Change"); Charles Kiesler, Yale University ("Group Pressure and Conformity"); Eugene Burnstein, University of Michigan ("Interdependence in Groups"); and Judson Mills, University of Missouri ("The Experimental Method").

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experiences and the myriad characteristics of adolescence. Most of the selections are new, and many reflect the current emphasis on youth culture functions and problems. A Teacher's Manual is available, gratis.

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THE STUDY OF ABNORMAL BEHAVIOR: Selected Readings, Second Edition

Edited by Melvin Zax, University of Rochester, and George Stricker, Adelphi University

Intended for use in the undergraduate course on abnormal psychology, this revision provides comprehensive coverage of both classical and contemporary issues in the field. A section on community psychology has been added, and behavior modifica-

tion, another emerging area, is dealt with extensively. The organization of the first edition into sections on general issues in abnormal psychology, psychopathology, and psychotherapy has been retained.

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school room. He may be seen daily, weekly, or not at all. He can be seen for a clearly defined purpose or one which may be obscure. In any event, what is done or not done will have its effect on the family as well as the clinic system, an effect which may be infinitesimal or profound" (p. 249).

This is only an extreme example of what occurs repeatedly. There is very little explicit technical advice of the sort that would aid the novice or challenge the experienced. Amidst the endless discourse on diagnosis and psychodynamics, recommendations such as the following are found: promote verbalization (p. 140), appropriate well timed interpretation (p. 133), not reacting emotionally to a child's negative feelings (p. 108), be a talented intuitive individual who does not react negatively to the rejection of the patient (p. 192). Incidentally, a recurrent, perhaps unintended message is that a medical degree is a significant asset.

Therapeutic skill is not attained by reading books but via experience, supervision, and personal development. In part, this may be true because most available literature is couched in imprecisely defined terms requiring the interpretation of an expert. Here, no discernable progress is observed. The easy and vague injunction—interpret, resolve, manage—is followed by illustrative case reports. These vary considerably in appropriateness (the cases in the chapter on phobias are all obsessives), detail, and clarity, and hardly constitute a means of teaching someone what to do. Greater explicitness is not unattainable; e.g., Ginott, Colby, and Satir do much better.

This book reflects a manner of thinking that though not yet dead is long past its prime. It presents a kind of psychoanalysis that has been superceded and hence it is no service to psychoanalysis or psychotherapy. It brings discredit to many insights and conceptions that have illuminated a murky ignorance and provided the foundations for a real, if elusive, technology.



A Mosaic About Culture and Personality

John J. Honigmann

Personality in Culture. New York: Harper & Row, 1967. 1 + 495.
\$11.50.

Reviewed by HARRY C. TRIANDIS

The author, John J. Honigmann, is Professor of Anthropology at the University of North Carolina. His PhD is from Yale. He is a specialist on North American cultures (Kaska Indians, Great Whale River and Frobisher Bay Eskimo), Pakistan, Austria, culture and personality, and medical anthropology. He is author of Culture and Personality, The World of Man, and Understanding Culture.

Harry C. Triandis is Professor of Psychology in the Department of Psychology at the University of Illinois. His PhD is from Cornell and his research is concerned with the analysis of "subjective culture"—the way of perceiving and conceiving of the environment that is characteristic of a group of people. He has developed a number of procedures that are designed to provide equivalent and "culture fair" measurement across cultures. He has contributed chapters to Berkowitz's Advances in Experimental Social Psychology, Vol. 1 and to the Sheriffs' Attitudes, Ego-Involvement and Change. He is also editor of the Cross-Cultural Social Psychology Newsletter.

Wallace, and John W. M. Whiting and the analysis of personality is provided mostly by S. Freud, E. Fromm, A. Kardiner, and A. H. Leighton. Although this list, of the most quoted authors, includes only anthropologists, psychiatrists, and sociologists, the less quoted authors include many psychologists, ranging from G. W. Allport, through Jean Piaget, to B. F. Skinner. The book is written with the professional commitment and interests of an anthropologist who has ventured into the other disciplines with an uncritical willingness to accept most of their method and theory.

Culture, according to Honigmann, embraces all socially patterned things and behavior. He conceives of personality as being in culture, i.e., as being a part of culture. Since culture "intimately involves man's biological organism in its operation" (p. 65), this definition is supposed to consider adequately both the 'nature' and the 'nurture' influences which form personality. However, it appears questionable that these definitions lead to much conceptual clarity. This reviewer believes that there is an advantage in keeping the biological and cultural aspects separate and considering personality as an outcome of both these influences.

The volume aims to teach how personality is patterned in different societies and social classes. It contains much

How does culture leave its mark on personality? This is the central theme of this volume in which the influence of culture is traced mainly through the works of Émile Durkheim, Margaret Mead, Melford Spiro, Antony F. C.

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*Edited by Robert M. Gagné, University of California, Berkeley
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This book should provide great intellectual stimulation and could be used in courses in educational psychology, human learning and classroom learning.

Contributions from Robert Glaser, Eleanor J. Gibson, Ernst Z. Rothkopf, Merle C. Wittrock and George G. Thompson.

1968 245 pp. \$6.50



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up-to-date material and provides a broad coverage of the area. Unlike Wallace's little volume, titled *Culture and Personality*, that has a definite point of view, the present work attempts to present a broad range of perspectives. It contains a magnificent mosaic of studies and points of view, presented with good scholarship and theoretical perspective.

Honigmann's orientation is eclectic, as is reflected in his statement: "I myself believe that to reject any path to knowledge is to choose to be that much poorer" (p. 99). His approach gives equal weight to data obtained from projective tests and from more reliable procedures. It can then be said that methodological sophistication is not the strength of this volume. On the other hand, the exposition of the various points of view is done sympathetically, clearly, and with considerable breadth concerning theoretical issues.

THE STRENGTH of the book is in the excellent descriptions of cultures. Socialization is traced from infancy through old age. Judiciously chosen examples of ethnographic materials illustrate the varieties of human child-rearing patterns and present a kaleidoscopic array of descriptions. Social class, race, and nationality are treated as important cultural variables and their influence on behavior and psychiatric disorders is given much emphasis.

Cultural psychiatry occupies about one quarter of the space. The relationship of ecology and epidemiology is followed by a detailed coverage of Leighton's studies of Stirling County in Canada and the Yaruba, and Srole's analysis of mental health in midtown Manhattan. Excellent descriptions of ethnic disorders such as *kayakangst* and *pibloktoq* among the Eskimo, the *witiko* among the Cree and the Ojibwa, various forms of Arctic hysteria and *latah*, *amok*, and *koro* as found in southeast Asia, and *susto* as found in Latin America provide both good understanding of the nature of the symptoms and a discussion of the relationship of cultural elements to these symptoms.

The classical anthropological orientation that clearly prevails in this book is aimed at identifying a few important

and unified themes which characterize a community or social class. The approach requires familiarization with myriad bits of evidence obtained from one culture. The ecology and the child-rearing practices are only a few of the elements in the total mosaic of facts that are brought to bear on the identification of such cultural themes. The typical behavior patterns and the behavior disorders that characterize a community are expected to be understood in the context of such themes. All of this has little to do with the psychologist's typical concern with independent and dependent variables.

Honigmann's eclecticism devotes 3 per cent of the book to what he calls the "dimensional approach" (pp. 288-295). The author is critical of this approach, because it does not identify underlying cultural themes. He focuses his presentation mainly on the books of (a) Sears, Maccoby, and Levin, (b) Minturn and Lambert, and secondarily on (c) Bandura and Walters, and (d) Whiting and Child. Some of the findings of these books are presented very clearly, though all too briefly. Thus, the best that psychologists have to offer in the culture and personality field is under-represented in the present volume. Nevertheless, the volume under review is a valuable item to include in bibliographies on culture and personality and cultural psychiatry. Some of the chapters would make excellent supplementary reading for students in courses in these fields.

In sum, this is an anthropologist's sample of the best in the intersection between anthropology and psychology. It is eclectic, scholarly, and well written; it provides excellent summaries of many important works. However, the reviewer's biases would have favored a very different sampling. Many important points of view elaborated by psychologists are absent or underrepresented; the book does not provide an improved understanding of the culture and personality field, nor a new theory or methodology, not even new insights of the kind that one might glimpse after a unified exposition of a large number of points of view. The book is mostly valuable because of its excellent sampling of ethnographic materials.

Who Learns What?

Robert M. Gagné (Ed.)

Learning and Individual Differences. (A Symposium on Learning Research and Development Center, University of Pittsburgh) Columbus, Ohio: Charles E. Merrill, 1967. Pp. xv + 265, \$5.95.

Reviewed by B. RICHARD BUGELSKI

The editor, Robert M. Gagné, received his PhD from Brown University in 1940 and since then has had a varied career, including some teaching (Pennsylvania State University, Connecticut College for Women, Princeton), and research (Air Force Human Resources Institutes for Research), and now he is Professor of Psychology at the University of California, Berkeley. He is author of *The Conditions of Learning*.

The reviewer, B. Richard Bugelski, received a PhD under Harold A. Hays at Yale in 1938 and has taught at Denison College and the University of Colorado. Since 1946 he has been Chairman and Professor of Psychology at the University of New York at Buffalo. He is author of *The Psychology of Learning* and *The Psychology of Learning Applied to Teaching*.

THIS important collection of papers was presented in April, 1965, at a Symposium of The Learning Research and Development Center of the University of Pittsburgh. The quality of the papers is exceptional for an enterprise of this scope and testifies to considerable and careful preparation of the conference. Robert Gagné introduced the symposium and edited the papers by the following cast: Robert M. Gagné, Robert Glaser, Robert M. W. Travers, Lee J. Cronbach, John B. Carroll, James J. Jenkins, Edwin A. Fleishman, Richard C. Anderson, Carl P. Duncan, Irving Maltzman, Delos D. Wickens, Arthur R. Jensen, Charles N. Cofer, Murray Glanzer, Paul M. Fitts, David Zeaman, Betty House, George J. Wischiner, Paul M. Kjeldergaard, Lee W. Gregg, and Arthur W. Melton. Each speaker attacked the problem posed by

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PSYCHOLOGICAL DEVELOPMENT OF THE CHILD

LANGDON E. LONGSTRETH, University of Southern California

Firmly based on current research in child development, this textbook presents the basic factors of heredity, learning, motivation, and intelligence, and then examines the progression from infancy to adulthood with frequent references to the research data. Throughout, the author employs an empirically based, systematic learning theory frame of reference. Instructor's Supplement available. 1968. 571 pp., illus., \$8.00

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individual differences for learning theory, and straying from the theme was minimal.

The personnel of the symposium were selected because of their willingness to face the fact that learning psychologists have virtually ignored individual differences for at least thirty years, notwithstanding the Hull-Spence programmatic concern and Skinner's efforts to eliminate such difference through experimental control.

One gathers that H. A. Woodrow's 1946 *Psychological Review* article (The Ability to Learn) was standard homework for the speakers, as several felt obliged to comment on his negative findings about intelligence and learning, and all of them seemed to feel the weight of his conclusions.

Starting with an excellent historical review by Robert Glaser, the symposium unfolded in the usual style of speech followed by comment. In this gathering the commentators (except for one instance) did not present papers of their own. The reviewer would like to see a symposium sometime wherein there would be more comment than presentation, but this one followed the routine pattern.

The speakers, all learning psychologists of stature, managed to cover the topic of individual differences (ID) from as many individually different viewpoints as might be imagined. The relationships of learning and ID were explored in terms of perception, attention, computer simulation, concept formation, problem solving, retardation, motor skills, verbal learning, and theory construction. In every instance the material was fresh, original and provocative, and very much worth while.

The excellent summary by Arthur Melton went beyond the content of the papers as presented and explored what appears to Melton to have been the latent meaning of the conference. The summary chapter, indeed, is a valuable contribution to the symposium theme in its own right.

Melton characterized the present unsatisfactory state of learning theory thus: "We have at this time no genuine theory of learning and performance." He then classified the studies and emphases reported at the symposium as

representative of two heretofore separate views, S-R and information processing approaches, and saw the development of a new orientation about learning developing from a synthesis of these approaches.

THE new synthesis, however, must be worked out in terms of learning process constructs that in turn must incorporate an appreciation of IDs. In this orientation, Melton borrowed heavily from Jensen who clarified the issues in previously barren ID research as due to a failure to distinguish between what he classifies as "extrinsic" and "intrinsic" IDs. Many learning as well as ID researchers, have concentrated their efforts on analyses of such extrinsic variables as sex, age, IQ, and other "traits." Such variables are secondary for Jensen, who thinks that whereas these ID features may have an effect on learning, they are not important in learning where intrinsic IDs are of the essence. Jensen regards IDs in such processes as inhibition, susceptibility to interference, arousal, and oscillation as the significant aspects of learning. Here is where theoretical understanding will be generated and not in concerns over group differences. According to Jensen, after all the extrinsic variations are accounted for we still will find intrinsic sources of ID. The analyses of these will help explain learning processes as well as the IDs themselves.

The Melton summary deals primarily with theoretical learning issues and ignores some of the earnest efforts of the speakers to relate their findings and views to the current educational crises with its concern over individual differences stemming from environmental restrictions. Cronbach, for example, urged learning psychologists to look for adaptive instructional techniques to develop stable learning rates instead of continuing our present task variable orientations and our easy-way-out solution for IDs, that of eliminating the student.

Glaser's comment about learning psychologists' indifference to differences might serve to invite wider interest in this small volume. He points out that physicists are concerned with the past

history of their materials and have developed a concept of "hereditary mechanics" whereas the psychologist takes his Ss as they come and conceals himself with statistical adjustments to account for variations. If psychological laws are going to be of value, they will have to account for the behavior of individuals. Perhaps the hard facts of social unrest will force psychologists to pay closer attention to

Building a Test from Scratch

Gustav A. Lienert

Testaufbau und Testanalyse. 2nd Ed. (Rev. and Improved.) Weinheim/Berlin: Verlag Julius Beltz, 1961. Pp. xxxii + 525. DM 35,—.

Reviewed by WALTER KRISTOF

The author, Gustav A. Lienert, is Professor of Psychology and Director of the Psychological Institute at the University of Düsseldorf, Federal Republic of Germany. He received an MD and a PhD in psychology from the University of Vienna and has taught at the Universities of Marburg and Hamburg. He is the author of five standardized achievement tests and two books: *Verteilungsfreie Methoden in der Biostatistik* and *Belastung und Regression*.

The reviewer, Walter Kristof, received his PhD in 1960 from the University of Marburg, Germany. He has been assistant professor at the Universities of Marburg and Giessen. He is now Research Psychologist, Psychometric Research Group, Educational Testing Service, and Privatdozent of Psychology, University of Giessen.

A FAIR ASSESSMENT of Lienert's book must take into account some his-



THE COURSE OF HUMAN LIFE—A Study of Goals in the Humanistic Perspective

Editors: Charlotte Bühler, *University of Southern California*
Fred Massarik, *University of California, Los Angeles*

Contributing authors:

James Bugental	John L. Fuller	Jean Livermore Sanville	Everett L. Shostrom
Bernice T. Eiduson	Herbert Goldenberg	Marianne Marschak	Tom Tomlinson
Rudolf Ekstein	Althea Horner	William McWhinney	Melvin Wallace
Robert Friedman	Arthur Kovaacs	Mortimer M. Meyer	Edith Weisskopf-Joelson

Until recently, the topic of goals has remained relatively unexplored, and the complexity of the goal setting process and its significance for the course of human life has not received "requisite attention." Concern with the person's goal setting as a procedure contributing to his eventual fulfillment or failure represents the humanistic perspective of the book.

Part I (the structure of human life itself) and Part II (the genetic base) set a framework within which the other factors unfold. Part III is a discussion of how early emotional dynamics provide initial specificity to the choice of goals and to the manner in which the process of their establishment is to go forward at later stages. The impact of socio-cultural factors is the theme of Part IV. Part V is an exploration of the need for an integrating system to lend significance to the process of human striving.

The book has another major purpose: to provide a starting point for psychotherapeutic approaches that are more effectively geared to the important human concerns with life's wholeness and ultimate significance.

432 pages \$10.00

A New Textbook

PROJECTIVE TECHNIQUES IN PERSONALITY ASSESSMENT: A Modern Introduction

Edited by A. I. Rabin, *Michigan State University*

Contributing authors:

Joel Allison	Mary R. Haworth	Leonard M. Lausky
Samuel J. Beck	Wayne H. Holtzman	David Levine
Sidney J. Blatt	Jules D. Holzberg	Charles Neuringer
Leonard P. Campos	Max L. Hutt	A. I. Rabin
Paul Daston	Bertram P. Karon	George C. Rosenwald
Emmanuel F. Hammer	Walter G. Klopfer	Jerome L. Singer

No new, comprehensive introductory textbook on projective techniques has appeared since those published shortly after World War II. This new book presents a panoramic view of projective techniques and a critical evaluation of developments in this field. Students, practicing clinicians, and researchers in the field of personality will find the book, because of its breadth and depth, useful as a systematic coordination and juxtaposition of theories and applications.

The framework of the book makes it possible to strike a balance between general issues and specific techniques and to present a diversity of approaches. Consequently, some chapters are written largely from a clinical viewpoint while others are more psychometric in orientation and nomothetic in approach.

All the chapters were written especially for this book. By making original contributions, the authors have written a timely and modern introduction.

648 pages \$11.00

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torical facts concerning the situation of academic psychology in Germany at the close of the war. Due to circumstances that need not be discussed here, 'the development of psychology as a quantitative-rational science' was at best rudimentary. Efforts in this direction were even met with suspicion, as some influential schools of thought viewed psychology as a basically speculative affair. The evaluation of individual differences rested almost exclusively upon intuition.

Things began to change, however, when the isolation, previously forced upon German psychology, gave way to an eager receptiveness to outside influences in the early fifties. Among the new imports, primarily from America, was an unheard-of emphasis upon differential psychology probably because of its seemingly unbounded usefulness in both practice and research. However, the available instruments, partly home-made, were often crude and sometimes violated basic principles of sensible test construction.

It was a younger generation of psychologists, as a rule without formal mathematical training but eager to learn, who tried to rectify this unsatisfactory situation. Lienert takes a prominent place here. Himself an author of five standardized achievement tests, he published in 1961 the first and so far only German introductory textbook in this area, *Testaufbau und Testanalyse* (Test Construction and Test Analysis). The revised second edition has recently become available. The book can be found on the shelves of almost every student, every researcher, and every practitioner. It sets the currently recognized standards of test construction and evaluation in Germany. This implies a particular responsibility on the part of the author.

LIENTERT'S book is meant to be purely technical. Emphasizing objective tests, it guides the test builder carefully through the various stages from tentative item writing to sampling of subjects and item analysis and then up to standardization, the use of test batteries and the statistical interpretation of test scores. Advice is given even on such things as the type of print to be used

for different sections of the test booklet. Each step of test construction is illustrated by way of examples. No detail is omitted. The book gives an extremely comprehensive coverage of all possible practical aspects and, in this respect, compares favorably with the initial chapters of the well-known texts by Anne Anastasi and L. J. Cronbach on psychological testing. Otherwise the scope of Lienert's book is different; the discussion of the architecture of tests remains predominant throughout.

The practical side of test building is supplemented by the usual apparatus of formulas and graphs, approximately corresponding to Chs. 13 through 15 of J. P. Guilford's *Psychometric Methods* (1954) and a cross-section of H. Gulliksen's *Theory of Mental Tests* (1950). Among the few newer methods included is a technique for item selection and a proposed speed-power index (author's original contributions). Derivations of formulas are not provided. The reader is spared any mathematical exertion, hardly to his benefit, though, unless he prefers to be guided blindly. If he does, however, he may fall victim to a number of misconceptions. He could, e.g., be induced to believe in the omnipresence of normal distributions. There are a series of statistical flaws and oddities. Space forbids details. The test theorist will discover them for himself; the student is more likely to be, at times, misled.

The book aspires to serve a good cause by advocating rigorous standards of test construction. The third edition is in preparation. It will, hopefully, invalidate present reservations, for German psychology needs *Testaufbau und Testanalyse*.



But destiny is a thing which no man can escape, neither coward nor brave man, from the day he is born.

—HOMER



Foundations of Sand

James A. Davis

Education for Positive Mental Health: A Review of Existing Research and Recommendations for Future Study Chicago: Aldine, 1966. Pp. 92. \$6.95.

Reviewed by GERALD CURIN

At the time this monograph was written, the author, James A. Davis, was Associate Professor of Psychology at the University of Chicago and a Senior Study Director at the National Opinion Research Center. He has since moved to the Sociology Department at Dartmouth College. He is the author of *Great Aspirations: Undergraduate Career Decisions*.

The reviewer, Gerald Curin, is a social psychologist and research at the Survey Research Center, The University of Chicago, on personality and value in educational settings. He has been in mental health research for ten years ago when he directed a national survey, the results of which appeared in book form as *Adolescent View their Mental Health, co-authored with Joseph Veroff and Sheila F.*

THIS MONOGRAPH synthesizes the principle findings and points up the major research needs in general research areas relevant to mental health education. The principle expertise Davis brought to this rather thankless endeavor is methodological rather than substantive; admittedly he is not a specialist in the field of mental health. Nor did he have the time to acquaint himself with the broad literature and to think through the conceptual issues in the area; he had one month for the literature review.

The review is, therefore, extremely selective. Given Davis's background and expertise as well as his interest in summarizing the firmly based findings in the area, methodological rigor, rather than conceptual interest, was the guiding criterion in the selection process. For those acquainted with the literature, it will

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for your spring, 1969 classes . . .



PROBLEMS OF PSYCHOLOGY

By KENT DALLETT, *University of California, Los Angeles*

Brief, lucid, succinct—this is a refreshing introduction to the main problems of psychology that omits details which are peripheral or which might detract the student's attention from fundamental issues. It is academic in approach, focuses on the individual rather than the group, and discusses some difficult and important topics not ordinarily treated in introductory texts. Dealing with questions basic to an understanding of general psychology, it is brief enough to allow for additional reading, yet leaves the student with no blind spots in any area of psychology which he might later encounter.

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Examination copies available December, 1968.

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ANIMAL SOCIAL PSYCHOLOGY

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By R. B. ZAJONC, *The University of Michigan.*

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come as no surprise that Davis found that "this criterion cut a considerable swath through the references." For example, in his survey of studies presenting relationships among various subjective (self-rating) measures of mental health, by applying such criteria as the use of large and representative non-clinical populations, Davis reduces his review to five studies.

That this monograph is useful despite these limitations is both a tribute to Davis's talents and a commentary on the chaotic nature of the mental health research area. By juxtaposing the findings from different studies with overlapping concepts or different measures of the same concept, by reordering published findings and some secondary analyses of data, by uncovering generalizations and suggesting possible reasons for inconsistencies across studies, Davis has helped organize and clarify our knowledge in this area. Although this often means exposing the foundations of sand on which our supposed generalizations and principles are based, the monograph serves a useful function for people who wish to do further research in this area.

DESPITE such usefulness, however, the potential contribution of this monograph is limited by its narrow methodological and empirical focus, and the decision to omit consideration of conceptual issues. Davis's review of the research on subjective measures of adjustment illustrates some of these limitations. He poses as a major issue the conceptually sterile old chestnut of whether or not mental health is uni- or multi-dimensional. Moreover, he sees the answer to this question in narrow, mechanical terms—the size of the correlations among different measures of subjective adjustment, rather than whether differential relationships with other variables validate the conceptual distinctions among the different dimensions. Thus, the review tends toward a mechanical organization of data rather than a clarification of ideas.

Davis's approach also limits his research recommendations. They are useful guides on how better to do what we have been doing. But in this field we

need decisions about the value of what we have been doing, a setting of priorities and a charting of new directions, and this cannot be done without handling the conceptual issues that Davis has avoided in this report. The monograph is still of value, particularly to those actively engaged in mental health research. But to those acquainted with Davis's work in the sociological literature, which has demonstrated unusual theoretical as well as methodological sophistication, it is disappointing that time pressures and his previous low involvement in the mental health area have inhibited the broader contribution this monograph might have made.

Psychotherapy with the Mentally Retarded

R. B. Fau, B. Andrey, J. LeMen, and H. Dehaudt

Psychotherapie des Débiles Mentaux. Paris: Presses Universitaires de France, 1966. Pp. 262.

Reviewed by HENRY LELAND

The first author, Rene Fau, is Professor of Clinical Neuropsychiatry on the Faculty of Medicine, Grenoble, France. The second author, B. Andrey, is Associate at the Institute of Psychological Studies of the Faculty of Letters and Director of the Psychopediatric Center at Grenoble. Jean LeMen is Professor at the Institute of Psychological Studies at Grenoble, and H. Dehaudt is Professor of Special Education, And Director of the l'Ecole Nationale de Perfectionnement at Sables-d'Olonne.

Henry Leland, the reviewer, is Coordinator of Professional Training, Education and Demonstration, Parsons State Hospital and Training Center, Kansas. He received his PhD from the Sorbonne in 1952, having done his undergraduate work at San Jose State

College, California. He has had 15 years of experience in institutions for the mentally retarded. He is co-author with D. E. Smith of *Psychotherapy with Mentally Subnormal Children*.

THE question of psychotherapy with the mentally retarded is one that has recurring interest in the usual area of contention centered around the relationship between the competence of the patient and his ability to benefit from counseling and improvement in understanding.

This book straddles the issue in that it comes down clearly on the side of psychotherapy but does not discuss who should receive this treatment. The authors feel that failure in the areas of rehabilitation and special education are due to the need for more therapeutic intervention. Further, the failure of the retarded to make appropriate social adjustments, among those retarded who are unsuccessful, is due to the fragility of the retarded's personality structure. They feel that psychotherapy can be successful in helping the re-education and learning processes and in repairing the damage created by social maladjustment.

The authors insist on short periods of psychotherapy with specific goals. They conclude that special education is necessary to the mentally retarded, that this special education cannot be successful when associated with emotional adjustment, and is a waste of time if it is not supported by psychotherapeutic processes. They also insist that this dual process be started before age six and make suggestions as to how it might be carried out within the milieu of the family. At the same time, they insist on medical supervision and set up a paradigm of doctor to psychologist to patient to doctor.

THE strength of the book lies in the understanding that the adaptive behavior of the child is as important to his eventual rehabilitation and success as the special education or training programs. The authors recognize that intervention in this area is necessary, and they recognize further that this intervention must be direct and directive.

On the other hand, they seem to be

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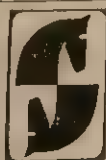
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In the interest of speedy publication this journal is issued at frequent intervals, according to the material received. As a rule 4 numbers constitute one volume. The price is DM 120,—; US \$ 30.00 per volume. Members of the "American Psychological Association" are granted a 15% price reduction.



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insisting on the patient achieving insight as a measure of success in therapy, and their over-all recommendation is weakened by an emphasis on traditional models of approach. One of the reasons that psychotherapy has been rejected by psychologists working with retarded children is that these models have not been highly productive. While psychotherapy is of benefit to the mentally retarded, this benefit can be achieved best by a departure from traditional psychotherapeutic processes in favor of more specialized intrusion and manipulation of structure. This latter aspect is emerging as the keystone in the psychotherapeutic process. While the authors have not overlooked this fact and underline the need for organization within the milieu, their adherence to the doctor-to-psychologist-to-patient paradigm seriously interferes with the effectiveness and economic use of psychotherapeutic procedures. They are, however, to be highly commended for recognizing that parents or the family have a role in the psychotherapeutic process.

I would recommend the book to anyone interested in work with the mentally retarded in France. In addition, it may serve as a stimulus to psychologists in America to rethink their attitudes concerning the use of psychotherapeutic intervention with retarded children.



(The Child) cannot understand that events can be meaningless and purposeless. Here, of course, he is joined by some Freudian theorists who may be inclined to attach great significance to miscellaneous bits of behavior, forgetting that just because everything must have a cause of some kind, it does not also have to have a reason.

—JOSEPH CHURCH



A Kilo and A Half of F

Sebastian Peter Grossman

A Textbook of Physiological Psychology. New York: Wiley, 1967. Pp. xix + 932. \$14.95.

Reviewed by STEPHAN L. CHOROVER

The author, Sebastian Peter Grossman, received his PhD in 1961 from Yale University. He has taught at the University of Iowa and is now Professor and Chairman of the Department of Biopsychology at the University of Chicago. His interests are in the correlation of neuropharmacological and neurophysiological events in CNS with behavioral changes presumed related to motivational variables.

Stephan L. Chorover, the reviewer, received his PhD from NYU, was a predoctoral research fellow at the Jackson Memorial Laboratories in 1958-59, and a post-doctoral during 1960-61 at the National Foundation Institute of Neurology, London, and at the University of Cambridge. He has been at the Massachusetts Institute of Technology since 1962 where he is now Associate Professor of Psychology. He is engaged in research on the biological basis of memory in animals, with particular emphasis upon the temporal characteristics of neuroelectrical processes involved in learning and perception.

THIS is one of the hottest-selling items among the new crop of physiological psychology textbooks. And little wonder, since it is unique in many ways. It is an extraordinarily large and lavishly illustrated book in a field where most other textbooks are neither. From the most casual inspection, one cannot help but come away with a strong impression of its visual splendor.

The book is chock full of goodies.

There is, first of all, a fusion of illustration more than six hundred beautiful line drawings, pictures, photographs, and oscillograph tracings, not to mention many tables. Adding to this instant appeal is the presence of a mass of printed matter, many facts, ideas, and theories of interest. There is much fine material in almost uncountable number of findings is quoted and more than a dozen are listed in the author's Extensive literature citations are provided.

These are only a few of the book's more obvious or apparent features. Though undeniably superficial, they winningly combine to give the volume an immediate and almost irresistible impact.

Before placing his purchase order (or better, before requesting his free examination copy—for possible class adoption) the prospective user of this compelling text may wish to know a bit more about it. To whom is the book addressed? What is its scope of content? Not unexpectedly, the author's preface provides some comforting and reassuring answers. Whatever the reader's field of neural science, whatever the level of his prior knowledge, this book is really meant for him: It "is intended as a textbook for graduate and undergraduate students in biopsychology, neurophysiology, and neuroanatomy. Extensive citation of primary sources should also make it a useful reference for research workers in these and allied

fields" (p. v). As to its organization and scope of content: "The four parts of this book are aimed at different levels of sophistication. The first provides a brief introduction or review of the aspects of neurophysiology and neuroanatomy that are essential for an understanding of subsequent sections. . . . The second part presents somewhat more detailed and extensively documented discussions of a sensory system (vision), the classical motor systems, and reticular mechanisms. Parts three and four contain the main body of information on the subject of physiological psychology" (pp. v and vi).

In summary, this book attempts to present a broad coverage of its subject in a way that will appeal to both the beginner and the specialist. Since their needs are not obviously identical, this is an ambitious undertaking. As far as the expert is concerned, suffice it to say that whatever his specialty, he will find here much that is useful and much with which to disagree. At very least, the value of this volume as a source of references and for capsule descriptions of research results cannot be questioned. For many, this beneficial feature alone will repay the cost of the book. Parts three and four will be particularly helpful in this regard, since they are largely composed of one-paragraph summaries of important and interesting experiments on hunger, thirst, sexual behavior, emotion, brain stimulation, learning, brain lesions, and memory consolidation. Thus, as a reference source for the specialist, this will be a valuable guide to the primary research literature. I know of no other currently-available single volume that cites as many experiments or refers to as many workers in the field.

BUT of course most of the people who will use this book are not research specialists, but students and their teachers. Therefore, it is as a graduate and undergraduate level textbook that this book must be judged first and foremost. And as a textbook, it is of an awfulness that bends the mind.

There are many reasons. First, it appears not so much to have been written as compiled. There is, to say

the least, a remarkable resemblance between the ordering of ideas (if not always words) in certain chapters of this book and in comparable sections of some exemplary (but secondary) textbooks and handbooks. It is difficult to exaggerate the scale on which this sort of "borrowing" has been done. Without desiring to burden the reader with many possible examples, I shall give only one short quotation and follow this with a list of a few places where several more can be found.

"Another peculiarity of volume conduction should be pointed out. Recording electrodes placed inside a volume conductor will record a potential only as long as the conducting structures are unequally or oppositely polarized. No potential is recorded when the tissue is completely polarized or depolarized because every solid angle is matched by an equal and electrically opposite solid angle. It follows from the property of volume conduction that slow changes in membrane polarization which have long decay constants in relation to conduction time cannot be recorded. The positive and negative afterpotentials of the spike potential typically fall into this category and cannot be visualized by recordings from a volume conductor" (S. P. Grossman, p. 27.)

"A final peculiarity of volume recording is that the recording electrode records a potential only when the conducting structures are unequally or oppositely polarized. When a cell is completely polarized or completely depolarized no potential is recorded, because every solid angle is matched by an equal and electrically opposite solid angle. It follows that prolonged changes in polarization with decay constants which are long in relation to conduction time do not appear in volume recordings. The after potentials have these characteristics and are not observed in volume recordings" (Woodbury, in Ruch *et al.*, p. 91-92.)

The preceding illustration typifies the book as a whole, in at least the following four respects: First, and most obvious, is the fact that the present author owes a debt to another that he fails to acknowledge. Second, the ideas in the present volume are presented in a more convoluted and awkward prose than in the original. Third, borrowed terms are used without definition. (Of course they are defined in the original.) Would one expect a student to understand such

a passage? What do "solid angle" and "long decay constants" refer to as used here? Fourth, how may the curious reader learn what such terms mean? Alas, he cannot, since the ideas contained in paragraphs that precede and follow in the original have simply been omitted from the present book. Can such frequent and usually baffling elisions leave a student (not to say an experienced person) anything but absolutely helpless?

For those who would care to check further, I offer the following suggestions for comparison between selected pages in the present volume and similar discussions in other secondary sources.

Chapter 1—Compare pp. 12-41 of the present volume with pp. 1-130 of *Neurophysiology* by Ruch, Patton, Woodbury, and Towe (Saunders, 1961).

Chapter 2—Compare pp. 44-59 of the present volume with pp. 78 *et seq.* in *The Neuroanatomic Basis for Clinical Neurology* by Peelo (McGraw-Hill, 1961). Also pp. 150-169 in the present book with the discussions of cranial nerves in the latter; also compare various parts of this chapter with comparable sections of E. Crosby *et al.*—*Correlative Anatomy of the Nervous System* (MacMillan, 1962; see for example, pp. 222 *et seq.* in the latter.)

Chapter 3—See, *Handbook of Physiology; Section 1—Neurophysiology* (Amer. Physiol. Soc., 1959). Compare, for example pp. 202-206 of the present volume with parts of pp. 1595-1598 in the *Handbook*; also pp. 206-210 with pp. 671-692; also pp. 211-216 with pp. 713-740.

Chapter 4—Compare pp. 241-248 of the present book with pp. 153-206 in the 19th Ed. of *Physiology and Biophysics* by Ruch and Patton (Saunders, 1965). Also, pp. 248-252 with *Handbook* (op cit.) pages 837-865, pp. 252 *et seq.* with pp. 863 *et seq.* and pp. 262-270 with pp. 1679 *et seq.*

Chapter 8—Compare, for example, pp. 467-475 with pp. 1225-1240 in the *Handbook*.

In order to avoid giving a wrong impression, let me make perfectly clear that the present book frequently departs from the precise wording and thought sequencing of the references cited. That is part of the problem. The present

volume contains many of the facts, but retains little of the clarity of style or lucidity of expression that distinguish its sources.

It must be emphasized, however, that in view of its size, and the enormous amount of highly-compressed material in it, this volume contains remarkably few factual errors. But, no matter how numerous and faithfully recorded they may be, facts are only facts. They can be compiled by a poorly-programmed computer about as efficiently as they can be assembled by a well-educated man. I tend to think that it is what one does with the facts that counts in a teacher and a textbook. Let us then query: "What has been done with the facts in this book?" The answer seems to be "as little as possible," but let the man who has assembled the facts speak for himself:

Sufficient literature citations are provided to give the reader easy access to primary and secondary sources for further study. *Interpretive conclusions have largely been omitted* (except in the chapters which deal expressly with theoretical issues) *because they often obscure rather than illuminate the important variables.* It is hoped that the experimental literature is presented in sufficient detail to permit the interested reader to form his own generalizations and conclusions" (p. vi—my emphases—S. L. C.)

Here then, are facts. Three and a half pounds of faithfully reproduced facts. Let the reader "form his own generalizations and conclusions."

A special word deserves to be said about Chapter 2 (Neuroanatomy). While it doubtless contains more facts than any other, it is unquestionably the worst chapter in the entire book. Here are three of the many reasons. First, the author's stated intent is to give the student the basic neuroanatomy "... essential for an understanding of subsequent sections." Why then is Chapter 2 devoted solely to human neuroanatomy? How does this equip the reader to deal with the markedly-different rat, cat, and monkey brains discussed in the "subsequent sections"?

Second, by using several different authorities in the compilation of this

chapter, the author ignores the fact that different anatomists call the same things by different names. Thus, while to an expert anatomist it may be enlightening and perhaps amusing to compare (e.g.) Sobotta's latinate nomenclature (e.g., Figure 2.81) with Kiss and Szentagothai's (e.g., Fig. 2.67), and both of these with Mettler's English nomenclature (e.g., Fig. 2.68), this is surely a challenge at which any student's mind would boggle.

Third, there is such a welter of trivial detail and pretentious complexity in the treatment of this subject that it is difficult to imagine how any student could wade through such a terminological morass without being forever "turned off."

Parts three and four, which together comprise about two-thirds of the book, have yet another distinctive feature. They are made up largely of short summaries or abstracts of research reports. These are introduced and strung together by statements that are not always logical: "The basal ganglia are known to be part of the organism's response mechanism; this may account for the obvious lack of interest that physiological psychologists have shown in these nuclei" (p. 760); and not always correct: "The only subcortical structure that has been shown to be susceptible to a spreading depression is the hippocampal formation" (p. 737).

At the risk of stating what may be already obvious, let me point out a paradox: many of the very features that give this volume its undeniable superficial allure and that make it a valuable reference source, are also the things that make it almost useless (or worse) as a textbook. Just two more examples may serve to epitomize this paradox.

The many figures that embellish this volume are taken from other sources. (Although this may not be true without exception, I was unable to find a single original figure in the entire book.) But that is not all. Many of the figure captions have been copied *verbatim* from their secondary sources with dismaying effects. A typical example is Figure 1.36 (p. 40). This figure shows that the muscle end-plate potential ac-

tually originates from the end-plate region (the now-classic finding of Fatt and Katz, *J. Physiol.*, 1951, 111, pp. 320-370). The figure caption clearly says (and the relevant illustration credit at the back of the book confirms) that this figure comes from Fatt and Katz's paper. But this is false. Actually both the figure and its caption are copied from the textbook of Ruch *et al.* (1961 ed., p. 114). Furthermore, anyone who consults the original paper will immediately note that Ruch *et al.* have not only redrawn the figure, but have also committed an error in describing it.

(In numerous other cases as well, it appears that primary sources that are said to have been consulted could not have been. Nor is this practice restricted to the illustrations. Precisely the same has been done with a great many of the "primary" literature citations.)

BECAUSE of the way in which this book has been assembled it is not surprising to find that the text contains innumerable repetitions and that the figures, quite often, do not "speak the same language" as the text. Frequently the illustrations embody different nomenclature and are either insufficiently detailed or so complicated to decipher without further explanation. Such explanation is rarely, if ever, provided. See, for example, the complex diagrams of the proposed "feeding circuits" of de Ruiter reproduced as Figures 6.63 to 6.65 in the present book (pp 381-2). With respect to these baffling figures, the text provides an uncharacteristically long "informative" passage, viz.: "The diagrams are essentially self-explanatory and may . . . orient us toward areas where information is most needed. They do not at present represent more than a pictorial summary of the often conflicting experimental literature, and we must be careful to accept the suggested pathways and centers with a grain of salt" (p. 381).

In summary, this volume is many things that a good textbook ought not be. It is as conceptually-impoorished as it is data-rich. It is mindlessly addressed to everyone in general and no-one in particular. It overwhelms with-

out enlightening, and impresses without informing.

WHAT should a good textbook be? I think a textbook of physiological psychology ought to try to be only one of three things:

First, it might try to present a point of view, to be opinionated, biased and perhaps somewhat data-poor; conveying the excitement that can come only from a selective and honest scholarly concern with theories and hypotheses that are interesting, though perhaps wrong. (The recent volume by Deutsch and Deutsch seems to me to be a good example of such a book.)

Second, it might try to present a detailed, comprehensive, and accurate account of a few important areas of contemporary research. This might be done, for example, by providing an in-depth synthesis of judiciously-chosen facts and theories on a limited number of topics. (The recent excellent book by Thompson seems to fall into this category.)

Finally, it might try to be a compendium; a multi-purpose comprehensive textbook like Ruch and Patton (op. cit.) or Goodman and Gilman (*The Pharmacological Basis of Therapeutics*). When their subjects were small, these volumes were written by one or two dedicated men. But the time is long since past when even the most exemplary scholar could hope to do the job alone and do it well. In order to retain their preeminence, these volumes have had to become collaborative efforts. Thanks to thoughtful and rigorous editing, they remain outstanding examples of informative and authoritative scholarship. Should one expect that it will take any less dedication, collaboration, and authoritative scholarship to produce a comparable textbook of physiological psychology?



Posterity is always the author's favorite.

—DR. JOHNSON



Recent Russian Books in Psychology

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The list includes some books in other languages, including the Ukrainian. For these items the language is indicated in parenthesis.

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Set

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pages of bibliography and a summary in English.]

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BARY, B. F. *Psikhologiya vnutrishnego movlennya* (Psychology of inner speech). Kiev: Radyanska Shkola, 1966. Pp. 192. [In Ukrainian.]

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BRFLY NTD

JOHN COHEN. *Psychological Time in Health and Disease*. Springfield, Ill.: Thomas, 1967. Pp. xv + 103. \$6.50.

The author touches briefly on the following problems: the internal clock; subjective time versus clock time for intervals of different orders of magnitude; orientation towards past and future; judgments of duration, distance, and speed under various experimental conditions. A chapter on "Aberrations of Psychological Time" consists largely of quotes and anecdotes; "Subjective Time in Myth" glances at history and art. In a final chapter the author strives "Towards A Model of Psychological Time."

The interested reader would do better with J. T. Fraser (editor), *The Voices of Time*, New York, N. Y.: George Braziller, 1966. That is a bargain at just under twice the price of Cohen's book, seven times its length and n times (where n is positive and large) its content of information and enjoyment.

MARIANNE SIMMEL

ANDREW CROWCROFT. *The Psychotic: Understanding Madness*. Baltimore: Penguin, 1967. Pp. 207.

The author undertakes to update the knowledge of the intelligent lay public regarding recent advances in the care of the mentally ill. He seeks to achieve his purpose by offering a clear account

in non-technical language of the diagnostic criteria currently in use, by summarizing the information that mental health specialists can draw upon in planning treatment, and by offering vivid illustrations of what one experiences as a mentally ill person.

The book approaches the etiology of mental illness from a developmental point-of-view and, consistent with the author's experience in practicing psychiatry in Great Britain, there is greater attention paid to social psychiatry and to community participation in the care of the patient than would be typical of a comparable American text.

It is a well-written book that is authoritative without being intimidating and, since it is printed in an inexpensive soft-cover edition, could well be added to any reading list recommended for laymen involved in the mental health movement.

RALPH HEINE

A. L. EDWARDS. *Experimental Design in Psychological Research*. 3rd Ed. New York: Holt, Rinehart & Winston, 1968. Pp. xix + 455.

The third edition of Edwards's experimental design book is about as different from his second edition as his second edition was from his first. As in previous editions he considers the binomial distribution, z , chi square, t , analysis of variance and simple analysis of covariance; and as in previous editions

he does not cover analysis of variance designs that have more than one within-subject variable, e.g., Ss in various groups each get several trials a day for several days. Additions to the text include a short chapter on the method of least squares.

ROBERT K. YOUNG

ROY R. GRINKER, SR., BEATRICE WERBLE, and ROBERT C. DRYE. *The Borderline Syndrome: A Behavioral Study of Ego-Functions*. New York: Basic Books, 1968. Pp. xiv + 274. \$7.95.

This is essentially a report of an intensive and lengthy study of hospitalized patients who were diagnosed as "borderline" in an effort to determine the characteristic of this diagnostic term and whether more specific sub-groups could be identified. The thrust of the research is behavioral by means of multiple observations of the patients' daily behaviors. The report also includes follow-up data after discharge and investigation of patients' families.

I. JAY KNOPP

C. R. B. JOYCE. *Psychopharmacology: Dimensions and Perspectives*. Philadelphia: Lippincott, 1968. Pp. ix + 430. \$10.00.

For those CP readers interested in the problems of drug use, this edited multi-discipline volume offers for the "man in the next laboratory" the research methodologies and findings relative to psychological pharmacology from such diverse fields as pharmacological psychology, neurological anatomy, biochemistry, epidemiology, ethology, and clinical practice.

I. JAY KNOPP



All science is derived from self-evident and therefore seen principles; and so all objects of science must needs be, in a fashion seen.

—ST. THOMAS



ARI KIEV (Ed.) *Psychiatry in the Communist World*. New York: Science House, 1968. Pp. x + 276. \$10.00.

While this volume is probably not of central interest to most CP readers, it does provide an interesting view of psychiatric theory and practice in parts of the world that are unfamiliar and relatively inaccessible to most Americans. Coverage by invited contributors includes the Soviet Union, East Germany, Hungary, Yugoslavia, Czechoslovakia, Poland, Bulgaria, Rumania, and China.

I. JAY KNOPP

EDWARD H. MADDEN, ROLLO HANDY, and MARVIN FARBER. *Philosophical Perspectives on Punishment*. Springfield, Ill.: Thomas, 1968. Pp. ix + 150. \$6.75.

A symposium on punishment held at the State University of New York (Buffalo) comprised four prepared addresses and a number of commentaries. Three of the major papers were written by philosophers (Charles A. Baylis, Brand Blanshard and C. J. Ducasse) and the fourth by an historian of law (Mitchell Franklin). Among those reading commentaries were scholars from philosophy, law, sociology, psychiatry, and anthropology.

The editors note that despite the principal papers being prepared quite independently, they converged significantly on certain views of punishment. All, for example, questioned both the retributionist and deontological views of punishment, while the utilitarian position gained a measure of support.

Psychologists may judge the psychological sophistication of the philosophers to be questionable while finding their language a bit formidable. Nevertheless, taking the addresses and the commentaries together, the book offers a succinct and informative review of theories of punishment and enlightening criticism of the justifications both individuals and societies use for applying particular corrective measures to those who deviate from law or custom.

RALPH HEINE

DAVID J. VAIL. *Mental Health Systems in Scandinavia*. Springfield: Thomas, 1968. Pp. xxvii + 157.

After searching and compiling a useful guidebook to mental health systems in Scandinavia, David J. Vail, Medical Director of the State of Minnesota Department of Public Welfare, decided to write one. Intensive digging for background materials, both through focused interviewing and some personal observations during an whirlwind tour of Norway, Sweden, and Denmark, resulted in an insightfully interpreting of the differences between U. S. and Scandinavian social-cultural traditions and public health practices. While disclaiming a pretense to be exhaustive or evaluative, the message is clear that some of our cherished notions of individualism and enterprise are no longer adequate to cope with social needs. A reconsideration of U. S. federal health practices could benefit from a look at the experiences gained in Norway, Sweden, and Denmark. Particularly noteworthy in the Nordic countries is the well accepted policy of social planning and the role of a large share of public resources in health and welfare services. There is a need of help receive it, without major restrictions.

Most of the monograph is devoted to "once over light" reports on mental illness, retardation, alcoholism, and forensic psychiatry in Norway, Sweden, and Denmark, including comments on organization, programming, statistics, manpower, and fiscal aspects. There is also a chapter on psychiatric diagnosis, with a comment by Christian Astrup, reflecting firm adherence to the medical model of disease and preference for an "organic" rather than "psychodynamic" orientation within the medical establishment. Regrettably, little mention is made of the emerging roles of other mental health professions, the growing tendency (especially in Denmark) of appointing psychologists or educators to head administratively independent youth clinics or residential units for emotionally disturbed children, or innovative programs in psychopedagogic rehabilitation. Until a definitive study of

mental health programs in the Scandinavian countries becomes available, Vail's slim but unhappily expensive monograph is recommended reading for jet propelled American visitors to Norway, Sweden, and Denmark.

HENRY P. DAVID

An Attempt at Reconciliation

Adolf Otto Jäger

Dimensionen der Intelligenz. Göttingen: Verlag für Psychologie, Dr. C. J. Hogrefe, 1967. Pp. xi + 421. DM 48,—

Reviewed by ADOLF F. VUKOVICH

The author, Adolf Otto Jäger, received his doctorate from the University of Göttingen and is Professor of Psychology in the Psychological Institute of the Free University of Berlin.

Adolf F. Vukovich, the reviewer, received his PhD from the University of Wien in 1957 and is Assistant Professor at the Psychological Institute at the University of Münster. His fields of interest are psychometrics, especially scaling, simulation of cognitive processes, the psychology of art and Gestalt psychology.

THE sincere hope that under fixed instructions the responses of all people to all stimuli can be represented economically and fruitfully by simple algebraic functions is common to factor analysis, principal component analysis, and nearly all the sophisticated scaling methods proposed from Fechner to Rasch and Coombs. Usual candidates for such functions are vector products or squared vector differences. Jaeger follows this traditional form of multivariate research. In some respects he

even drops cautious compromises, for instance by using only formal rotation criteria to find the most reasonable basis for an interpretation of the factors. Contrary, however, to the notorious optimism of many authors in this field, he draws the attention of the reader throughout the text to the questionable simplification implied by a monistic reduction scheme.

Today no one expects a laurel-wreath if he discovers another set of uncorrelated behavior components. Jaeger seeks a remedy for the startling inflation of intelligence factors that ingenious test construction produced during the last 20 years. Still trusting the inductive value of short term engagements with unfamiliar questions, and unmoved by the fate of the saurians that couldn't or wouldn't stop growing, he strengthens a present trend in correlational research by enlarging the problem sample.

THE achievements of 300 young men of college level in more than 230 separately timed paper-pencil-riddles that could be arranged in 69 subtests of the usual form, render the basis for a comparison of three rival, psychometrically-derived, theories of intelligence. Thurstone's system, a version of Meili's Gestalt-orientated conceptualization, and a slice of Guilford's cubic picture of the mind are put to test. Five times each theory gets a chance for confirmation. Jaeger analyzes (1) properly selected subsets of items, (2) combinations of these items into phenomenological homogeneous tests, (3) hypothetically pure factor tests, once excluding, (4) once including doublettes. Finally the three theories are confronted with the six-factor solution that emerged in a respectable analysis of 234 variables.

In addition, in six separate analyses, Jaeger brings to light quite a lot of well-known factor types out of overlapping subsets of items that were biasedly selected according to the loadings in one of these main factors. He terms this method "analysis of the internal structure of a factor." It is related to Burt's and Vernon's conceptions.

Unfortunately, at the time these re-

sults were worked out, two important calculation procedures were not at the author's disposal: First there was no program at hand to rotate a primary matrix in the direction of a theoretically prescribed loading pattern and to determine the mutual similarity. Therefore Jaeger restricts himself to intuitive judgment and verbal descriptions. The unavoidable vagueness of colloquial language demonstrates once more the need to fix the vague paths of intuition in carefully formalized descriptions of the hypothetical solution processes of the subjects. Secondly there was no program easily available of Lawley's test of significant components. Various rules of thumb led to intolerable divergencies. As a man of action Jaeger solves such a dilemma by practical inquiry.

THE decision that traces the communality of the 234 variables back to six factors rests on the interpretability and stability of loading pattern in 10 or more rotations with an increasing number of principal factors. Using this strategy, it is advisable to start the maximization of the unknown criterion function from chance positions of the vector cluster. The efficiency of electronic computers confers a touch of skillful play on this trial-and-error procedure.

Some chapters of Jaeger's script display the qualities of a comprehensive textbook, while others resemble a research report written with an easy hand. It contains a broad display of numerical results and a collection of intelligence items similar to the old publication of Stern and Wiegmann (1922) or Guilford's book on personality.

Everyone actively concerned with factor analysis will be interested in reading this stimulating book by a dedicated scholar in the field of multivariate research. Jaeger's investigation, however, fails to answer the initial question: where does the uncomfortably large number of factors come from?

No Tolerance for Poverty

Kenneth B. Clark. Foreword by Gunnar Myrdal

Dark Ghetto: Dilemmas of Social Power. New York: Harper & Row (Harper Torchbooks), 1967. Pp. xxviii + 251 + 8. \$1.75.

George A. Brager and Francis P. Purcell (Eds.)

Community Action Against Poverty: Readings from the Mobilization Experience. New Haven, Conn.: College & University Press, 1967. Pp. 349. \$7.00 cloth, \$3.45 paper.

Bernard Goldstein, with the assistance of Barbara Steinberg and Harry C. Bredemeier

Low Income Youth in Urban Areas: A Critical Review of the Literature. New York: Holt, Rinehart & Winston, 1967. Pp. vii + 280. \$3.95.

Reviewed by SHELDON R. ROEN

The author of the first book, Kenneth B. Clark, received a Columbia PhD, has taught at Hampton University and, since 1942, has been at CCNY where he is now professor. Since 1946 he has also been Research Director of the Northside Center of Child Development. He is well known for his work on the problems of the ghetto. The first editor of the second book, George A. Brager, is Associate Professor of Social Work in the Columbia University School of Social Work. His co-editor, Francis P. Purcell is Project Coordinator of Design for Urban Education, a project of Rutgers University and the Newark Board of Education. They were both associated with Mobilization for Youth. Bernard Goldstein, author of the third book, is Professor of Sociology, Urban Studies Center and Chairman of the Department of Sociology, Rutgers University.

The reviewer, Sheldon R. Roen, is Associate Professor of Psychology and Education, and Director, Psychological Consultation Center, Teachers College,

Columbia University. He is editor of The Community Mental Health Journal and a founder of the APA division of Community Psychology. His PhD is from Teachers College.

THERE may have been a time when the poverty of one's neighbor was acceptable; perhaps there was even once a valid economic argument for the unemployment of some. But no longer does the nation see poverty as tolerable, and Congress has declared war to prove it. Whether one is interested in discovering basic truth, eradicating epidemics, fashioning a political force, helping people in trouble, or planning social change, there are potential satisfactions enough for all in working with this problem.

The authors and editors of the three books under review certainly feel this way. The books complement each other well: the first is a coherent exposition of life and its problems in a particular ghetto; the second is a compilation of articles related to a prototypic anti-

poverty program; and the third is a survey of research literature.

Professor Clark's book, of course, not new, having been published originally in hardcover in 1965, is based predominantly on his work at Haryou where he was chief consultant and board chairman. It also reflects itself as a "summary of my personal and lifelong experience and observations as a prisoner of the ghetto long before I was aware I was really a prisoner" (p. xv). We have in this book then is one of the rare and precious occasions when the author of distinguished scientific, professional, and political credentials illuminates a social problem through the perspective of an "involved observer."

Beginning with a poignant prologue on the "Cry of the Ghetto," Clark illustrates with transcript the point that a narrow view of the ghetto distort the truth about lives that are actually experienced. Witness the following: "No one with a mop can expect respect from a banker, or an attorney, or men who create jobs, and all you have is a mop. Are you crazy? Whoever heard of integration between a mope and a banker?" —(Man, age about 38.)

After an analysis of the "invisible wall" that defines the ghetto, Clark presents in scholarly fashion the social, psychological, pathological, educational, and political aspects of ghetto life. This leads smoothly to a discussion of strategy for change where power, defined as "energies required to determine and to translate goals into a desired social reality" (p. 199), emerges as the crucial and nuclear issue. Although some might have stopped here, this social psychologist reaffirms the truths he is seeking by bringing the discussion back to the individual with an analysis of "the ghetto inside," the common human predicament of both blacks and whites.

THE edited book by Brager and Purcell derives from activities associated with Mobilization for Youth, the comprehensive community project located on the lower East Side of New York City. This project, sponsored initially by the President's Committee on Juvenile Delinquency and Youth Crime was

one of the important early forerunners of current antipoverty programs. One should, however, not come to this book for an authoritative history or a coherent conceptual analysis of the Mobilization experience. Much of its content is more general in nature, since the criteria for including articles seems to have been that an author must have at some point crossed the path of the agency. The quality of the articles is therefore quite uneven, having been drawn from such diverse sources as dissertations, and the proceedings of institutes and symposia. The bulk of the twenty chapters has been published previously and only two chapters appear to have been written especially for this volume. The book contains an insightful paper by Cloward and Epstein on "Private Social Welfare's Disengagement from the Poor," abstract articles on public policy and social justice, and an early formulation of the use of nonprofessionals by Frank Riessman. Although the reader does obtain fairly good sampling of the many faceted activities that currently define neighborhood service centers, the chapters neither flow one from the other nor has much effort been made to bridge them. The meager subject index is of little value.

BERNARD GOLDSTEIN, a sociologist, has performed an important service in cul-ling the literature on *Low Income Youth in Urban Areas*. In seven separate *Psychological Bulletin* type reviews he discusses research findings under the following topics: Family of Orientation, Education, Work, Family of Procreation, Religion, Government and Law, and Leisure Time Activities. This sociological classification might turn off the more insulated psychologists among us except that the second half of this book treats us to informative annotated references, a very distinct improvement over the mere listings to which we have become accustomed. Goldstein's scholarly approach to citations and cross indexing makes this a very useful reference guide to the material published primarily from 1950 to mid 1966. One might wish, however, that the author and his team had not restricted the psychological literature "primarily to the

area of educational psychology, with occasional forays into social psychology." However, despite his modest disclaimers, Goldstein has more than fulfilled his stated purpose of the "erection of guideposts to assist the hurried or inexperienced traveler."

FOR those who doubt that poverty is a proper subject of inquiry for psychology, these books provide compelling counter-arguments. In flushing out the significant correlations between poverty and: mental disorder, crime, educational failure, family disruption, ill health, alcoholism, drug addiction, violence, or you name it; the authors may well be saying that as a profession we can contribute as much to the general welfare by nurturing those among us who are poor as we have therapizing those whose symptoms are mental aberrations; or, as a science, we might from a detailed study of poverty extricate psychological understandings at least as germane to our interests as those we have perceived in studying other deviant phenomena.

The quest for conceptualizing the pivotal elements underlying the clustering of social pathologies has undoubtedly been advanced by the publication of each of these books. Having *Dark Ghetto* now in paperback should help to overcome the lack of material, decried by Clark, for preparing graduate students for the "realities and complexities of involvement in a real, dynamic, turbulent, and at times seemingly chaotic community" (p. xv). In putting together readings from the Mobilization experience, Brager and Purcell have provided somewhat of a bench mark against which subsequent community action programs can be measured. And by inventorying some of the relevant literature, Goldstein has added perspective to the problem by extending it in directions not immediately apparent to those who stand too close.

Collected Essays

John R. Seeley

The Americanization of the Unconscious. New York: International Science Press, 1967. P. 456. \$8.95.

Reviewed by IRVING E. ALEXANDER

The author, John R. Seeley, has had a rich and varied career. His origins are British, his higher education American (University of Chicago BA, 1942) and some of his best work was carried out in Canada. He has held academic positions at the University of Toronto, York University, and Brandeis University. In the latter two institutions he has served as Chairman of the Sociology Department. He has co-authored *Crestwood Heights*, *Community Chest: A Case Study in Philanthropy* and *The Alcohol Language*, volumes based on his research activities. Since leaving Brandeis in 1966 he has served as Dean and Director of Program, Center for the Study of Democratic Institutions, Santa Monica, California.

The reviewer, Irving E. Alexander, is Professor and Chairman of the Psychology Department at Duke University. His PhD is from Princeton and he has taught there and at the University of Alabama. From 1958 to 1963 he was with NIMH. His special interests are in the clinical process and in personality theory.

GATHERED together for the first time is this collection of published essays and unpublished lectures, the work of the past eighteen years carried out by a thoughtful and provocative applied sociologist. The papers, though varied in scope and content, deal with the analysis of man in culture from the standpoint of one who is thoroughly versed in his own field as well as in the theory of psychoanalysis. In fact, the major single thrust of these papers is contained in the argument that a more powerful theory of man than we now have awaits the combining of knowledge from both realms, a confrontation in the modern parlance.

While each of the thirty-three chapters stands as an independent unit, they are nevertheless meaningfully combined into three major sections that deal broadly with the analysis of historical developments in psychiatry and sociology, the philosophical justification for an applied sociology, and selected problems of cultural analysis and criticism. Included in the latter section is a fair sprinkling of the empirical work to which Professor Seeley has devoted a good share of his professional life, work involving whole communities and a variety of mental health specialists.

Certainly within these pages one will see eloquently explicated some of the fundamental value problems that have plagued psychologists as well as sociologists and psychoanalysts in the post-World War II expansion of activity in their disciplines. The problems of pure as opposed to applied science as routes to critical knowledge or that of whether man is "really" a cultural rather than an intra-psychic product are ones to which we have been attuned in recent years and are treated in this volume. However, because of their obvious prominence there is some satiation involved in rehashing these issues. Cross-disciplinary interaction, confrontation, cooperation, and the like are not simply a function of the logic of such endeavors. In some sense we are beyond that. It becomes perhaps more a matter of how and whether it can be realistically accomplished. The analogy to the position of world powers *vis-à-vis* one another is obvious.

In this respect Seeley's volume may seem a bit dated. It deals with the specific relationship between sociology and psychoanalysis. Given all the possible alternative routes to the discovery of knowledge, I cannot believe that these papers will convince more social scientists to regard psychoanalysis as the discipline propaedeutic to their work or persuade orthodox psychoanalysts that without attention to social science training their understanding of human nature is vitally deficient. Toward these ends the volume is not novel nor sufficiently powerful.

What did come across strongly to this reviewer is that these essays provide the opportunity to be in contact

with the thoughts of an acute observer of the human scene. Seeley does not let you read in peace. He jars, he chides, he threatens, he mocks, he pleads, and he cajoles. What he says can vary from the obvious and trivial to the uniquely seen and important. In fact, the greatest

pleasure this reader derived from the book was the unexpected succession of gems of wisdom appearing asides, examples, or explications of sometimes labored central themes. For this reason alone to be introduced to Seeley is worth the price of admission.

ON THE OTHER HAND



In this Department CP invites discussion of reviews and of books reviewed. Here is the place for that kind of intellectual dissent that promotes progress in understanding. Let your criticism be ad verbum, not ad hominem. Seldom does a criticism merit more than half the space of the text criticized—never more than equal space and then only when the letter is interesting and well written. CP edits letters when it thinks they should be. Single-spaced letters will be returned for double-spacing. Please send carbons.

NEVER TRUST A REVIEWER UNDER 30

The chore of selecting appropriate reviewers for the many books CP receives must be a difficult one, but I wonder if the process of selection could not be modified somewhat so that reviewers bring to their assignment at least minimal credentials. Ideally, of course, a reviewer should have written (or attempted to write) a textbook himself, or at least should have otherwise distinguished himself as a teacher of the subject matter he is assigned to evaluate. But given the reality of a review editor's unenviable task of finding such author-reviewers or distinguished teachers, and given the ready availability of lesser critics, I believe it is the editor's responsi-

bility to select carefully from among the latter pool of self-styled critics. One criterion for selection, quite simple and arbitrarily, might be to assign letters to persons who have taught the subject matter at hand for at least three

The occasion for this recent foundation is the recent review of the husband and wife team of Edward and Kay Hux (June, 1968, 13, 6.). Their combined experience of college teaching (other than as graduate assistants) could not have amounted to more than six months of time that they set out to review Lazarus's Foundations of Psychology Series. Now, then, are they qualified to review the combined efforts of such experienced teachers as John Carroll, Ray Hyman, Richard Lazarus, Julian Rotter, and Leona Tyler, to name just a few of the fourteen authors who contributed to the Foundations of Modern Psychology series? But be this as it may, the level of their comments, and the organization of their review are sophomoric at their best, and silly at their worst. The fact that most of the individual books of this series had already been reviewed separately [not in CP—Eds.] makes their puerile observations even less essential.

BENJAMIN KLEINMUNTZ
Carnegie-Mellon University

REJOINDER

The editors cannot deny the desirability of experience. But the view that those with extensive teaching—or any other kind of relevant professional experience will eventually achieve the necessary compe-

tence to prepare an acceptable review of a book, or that those who have not yet accumulated a certain number of postdoctoral years inevitably lack sufficient competence, is one to which we must take exception. But this is an issue about which our readers must form their own opinions. It must be pointed out, however, that the responsibility for choice of reviewers is solely that of the editors. If any error in judgment has been made in allowing the appearance on these pages of our younger colleagues, it is ours, and we offer our apologies to the hapless reviewers mentioned in Dr. Kleinmuntz's comments. Fortunately, youth is a disease that cures itself.

EDITORS

ERRATUM

In the June, 1968, issue of *CP* (p. 329), Dr. Hans Toch was erroneously reported to be at the School of Criminal Justice, Michigan State University. Instead, he is at the School of Criminal Justice, State University of New York at Albany.

Eds.

OMISSION AND ERROR

The editors would like to point out that in the June issue of *CP*, 289, there was not only an omission but an error in the bibliographical data for the Hilgard and Atkinson book, *Introduction to Psychology*. The correct reference is as follows: Ernest R. Hilgard and Richard C. Atkinson: *Introduction to Psychology*. 4th Ed. New York, Harcourt, Brace & World, 1967. Pp. xvi + 686. \$8.95.

Eds.

REPLY TO ENG

Psychology and psychoanalysis have changed considerably over the past forty years and a 1928 treatment of these topics is as out of date for modern French psychology as it is for modern American psychology.

DAVID ELKIND
University of Rochester

Bridging Some Gaps

Everett D. Erb and Douglas Hooker

The Psychology of the Emerging Self. Philadelphia: Davis, 1967. Pp. xiii + 289. \$6.00.

Reviewed by ROBERT N. SCHNEIDER

The first author, Everett D. Erb, is Professor of Counseling and Psychology and Director of the Counseling Center at East Texas State University. The second author, Douglas Hooker, is on leave from Southwestern University, where he is Chairman and Professor of Psychology, at Princeton University where he is doing research on psychology and religion.

The reviewer, Robert N. Schneider, has recently reviewed for *CP*. His PhD is from the University of Missouri. He is Director of Community Psychological Consultants, St. Louis. He formerly was with Psychological Associates in the same city. He is interested in enabling people to develop their skills in solving problems.

IN MANY WAYS, *The Psychology of the Emerging Self* is a book that deals with gaps. In their Preface, authors Erb and Hooker state their awareness of a tragic discrepancy between the knowledge that modern day psychology has about human behavior and the premises that most Americans follow in the conduct of their behavior. With their book, the authors hope to "make a contribution toward the gap between the way people live and the present level of professional understanding concerning effective interpersonal relationships" (p. vii). Thus, the main purpose of the book has to do with a gap between what is known by few and what is done by many. Following their implicit premise that the main reason

for this state of affairs is that behavioral scientists are not getting the word to the public, the authors of this book have made a very definite move in that direction.

In pursuing this objective, it seems to the reviewer that the authors come face to face with a number of other gaps that are familiar to psychologists and around which this review can be organized since it is in the handling of these issues that the major assets and liabilities of the book are reflected.

First to be considered is the book's approach to the currently prominent gap between a competency/growth model and a deficit/illness model of man and his actions. The authors deal with this issue implicitly in their approach to the reader and explicitly in much of the substance of what they present. Regarding the substantive information, the authors present a model of man and his behavior that views deficit and growth as opposite ends of a continuum and, in that way, they attempt to reconcile any apparent dichotomy between the models. However, in considering the purpose of the book and the nature of its discourse, it seems that the competency model of man commands the authors' major emphasis.

Given this emphasis on man's capacity to use knowledge and increase his skills for effective behavior, the authors approximate a respectable congruence between the *content* of what they say and the *process* of how they say it. In terms of content, the authors draw

heavily on the work of Rogers, Gordon Allport, Maslow, and George Kelly in their emphasis on the phenomenology of the individual person as the basic unit of analysis (Rogers); on the goal-directedness of man's behavior (Kelly), arranged in a hierarchical fashion (Maslow); and on the importance of values, effective thinking and problem-solving (Allport). In this emphasis, the authors by no means neglect other significant contributions from the body of current psychological knowledge; on the contrary, they do an admirable job of reporting a wide range of psychological research in such a way that the interested and intelligent reader can relate it to everyday life.

THE CONGRUENCE of the process of their writing with its content is reflected in a number of ways. The book is written directly to the reader; he is advised to try to approach the book with an open mind, without undue deference to its authoritativeness, with appreciation for tentativeness, etc. Interspersed throughout the book are accounts of the authors' personal experiences, offered as examples of the points under discussion. Thus, the reader is explicitly encouraged to *relate* to the material. Such congruence between content and process is difficult to attain, and although there are a few notable lapses to be discussed below, the authors are to be commended for the consistency they demonstrate.

A second familiar gap that Erb and Hooker attempt to close involves the apparently inevitable dichotomy of consciousness and unconsciousness. Their model is heavily intrapersonal in orientation, and in light of the current level of our knowledge of man and the prominence of the concept of the unconscious, it is understandable that they attempt to deal with this issue. In their formulation, they attempt to bridge the gap by postulating "different levels on a scale of awareness or consciousness" (p. 12). However, their handling of this problem seems to the reviewer to represent one of the lapses into inconsistency referred to earlier. Although it seems to the reviewer that the major difficulty rests with the concept of the unconscious and

not the authors' use of the concept *per se*, their handling of it reflects the difficulties involved and certainly does nothing to alleviate them. At one point, in an attempt to remove unconscious processes "from the realm of the mysterious, mystic, or supernatural. . .," the authors state: "For one person, a slip of the tongue may be purely an accident, but for another person it may be a meaningful clue to some unconscious intention." They then proceed to cite an experiment on subliminal presentation of stimuli, apparently to exemplify the operation of unconscious processes, and conclude that the subjects "were being influenced by stimuli of which they were unaware" (p. 48). Bypassing the familiar theoretical issues involved in equating "unconscious intentions" with subliminal influence of external stimuli and the problem of who is to decide what action is "purely an accident," one must wonder how the intended reader of this book would be able to use this information for self-growth. In a similar way, the chapter on "adjustment mechanisms" depends heavily on unconscious processes, and seems to me to be as confounding as it is enlightening in an essentially self-help book.

ONE final, and minor, gap. Although the title of the book and 12 of its 15 chapters are individually- and intrapersonally-oriented, the stated purpose and the final message of the book place the major emphasis on the achievement of more effective interpersonal relationships. Thus there appears to be something of a gap between the title and the objectives of the book, and incidentally between the title and the main exposition. From these points of view the title is misleading, since very little is said about the emerging self. A more descriptive title might have been, *The Person in Interaction*, or something conveying that essential information.

With the few exceptions presented, this book appears to reach the objectives set by the authors for their intended audience, the intelligent non-professional. Despite some strained analogies, an occasional farfetched example, one or two less-than-helpful figures, and some inconsistency in the

authors' generally relativistic epistemology, the book is considered to be clearly written, interesting, and enlightening to a reader who wants to relate psychological knowledge to everyday life. In the reviewer's opinion, the book succeeds in making important strides toward bridging the gap between scientific knowledge at this point and daily living. Therefore, the authors' suggested uses of the book by undergraduates in courses in personal adjustment and mental health, by people engaged in informal study and discussion groups, and by students in beginning classes in a general education curriculum, can be enthusiastically endorsed.

McGuffey Made New: Diffusing Morality

Fannie R. Shaftel. Story by George Shaftel

Role-Playing for Social Values: Decision-Making in the Social Studies. Englewood Cliffs, N. J.: Prentice-Hall, 1967. Pp. xv + 431. \$5.75.

Reviewed by MATTHEW B. MILES

The author, Fannie R. Shaftel, is Professor of Education, Stanford University. She is co-editor, with Jean Fair, of *Effective Thinking in the Social Studies*, 37th Yearbook, 1967, National Council for the Social Studies. Her major interests are elementary school studies, intergroup education, and elementary school curriculum. George Shaftel, her husband, is a professional writer, with degrees from the University of California, Berkeley. He is author of *Golden Shore*, *Guidance in the Modern School* (with Henry B. McDaniel), and *Westward the Nation* (with Alice Means Reeves et al.).

The reviewer, Matthew B. Miles, is

Professor of Psychology and Education, Teachers College, Columbia. He is a Fellow of National Training Laboratories and does research on the impact of human relations training. He has been involved for the past four years in the problem of inducing and studying organizational change of a self-renewing sort in school systems. He is author of Learning to Work in Groups and editor of Innovation in Education.

THIS BOOK has a high aspiration: to diffuse a social technology (role-playing) into American schools for a particular purpose: the inculcation of moral values. The moral values chosen are important (honesty, non-prejudice, equity, personal integrity), and the technology is at least a plausible one for the purpose at hand.

What are the requirements for diffusing anything—turtleneck shirt, hybrid corn, or modern math? Potential users must ordinarily have a very clear idea of just what the innovation is like, and of the potential rewards and costs involved in its use. "Rewards" usually implies as a minimum that the user believes the innovation will move him toward some goal he has in mind. If the costs look high, some kind of protected trial is usually needed. Finally, the user must possess or learn any skills required to operate the innovation, assuming he decides to keep using it.

This book is a good try, but meets these requirements only partially. It consists of a section on "theory and methodology" with discussion of the educational purposes and outcomes of role-playing, accounts of role-playing (mostly hypothetical or severely elided), advice for the teacher, and a section including 28 unfinished "problem stories" designed as kickoffs for role-playing.

But the descriptions lack full clarity (there do not seem to be any actual, direct transcriptions of role-playing sessions); there is scant mention of costs (dangers, problems, risks); no suggestions are made for protected trials (as in in-service workshops); and the authors seem to believe that verbal advice ("You need to know your group, its social structure, its individual needs, the dynamics of social interaction that help or deny children opportunity. . .)

will in fact cause the development of skill in using a reasonably complex technique. The authors rightly stress that role-playing requires the teacher to abandon a directive, didactic style and create discovery-oriented learning situations. This is a fundamental shift for most teachers, as many of the national curriculum-makers have found. It requires not only supporting materials (films, tapes, apparatus) but a chance for practice and personal feedback (observation, videotaping). Not once do the authors suggest the obvious: that teachers might best learn how to run role-playing sessions by role-playing the running of some role-playing. So as an exhibit of how to diffuse this technique, the book compares poorly with other similar attempts, such as Maier's (1957) manual for use in industrial settings.

THERE is a more fundamental question: will role-playing as described here really change moral values? Maybe it will, but the book is long on assertion, and short on research: Mann's (1956, 1964) reviews of empirical studies should certainly have been discussed. The assumption throughout is that increased insight into dilemmas of moral choice and their consequences will in fact result in more moral choices in the future. Perhaps—but we have psychotherapy researchers, Eichmanns, cigarette smokers, and millions of other human beings whose daily life indicates otherwise. No real theoretical support is given for the claims presented, in spite of a series of "propositions"; the review of role theory is not informed enough to make the reader aware of what a morass is being discussed.

As if the authors do not quite trust the effects of peer influence (à la Makarenko), they prescribe a teacher role that is essentially benevolent/manipulative (e.g., deliberately selecting an "anti-social" child-invented solution for the first role-playing episode, following it gently with "socially acceptable" ones.) At least the McGuffey readers did not pretend to "help" children "discover" moral truths.

The tone and flavor of the book is that of the educational 1950's ("felt needs and interests"). Though there is

a valiant attempt to discuss the problems of "disadvantaged" children, the authors' efforts to be modern tend to creak (e.g., a proposed value dilemma involves a choice between Leonard Bernstein and the Beatles) or are simply irrelevant (smoking and drinking as moral issues for a college student). What one misses is a sense of the tragic (vide Kohl, *36 Children*, or any issue of the *Urban Review* for counter-examples).

The approach, is short, is primarily exhortational. Perhaps approaches to moral education are difficult to present without preachment—but what we need are data on the consequences of using social technologies, not admonishments.

All this is too bad. Much effort went into the book; the stories look interesting (though probably more to upper elementary children than to teenagers). And role-playing is an educational technology that probably has more impact on attitudes than discussion, certainly than lecturing. As it is, the book will probably be fairly useful to those teachers who are already using role-playing. But that isn't diffusion.

Vintage Freud

Sidney L. Copel

Psychodiagnostic Study of Children and Adolescents. Springfield, Ill.: Thomas, 1967. Pp. xii + 200. \$7.75.

Reviewed by IRA M. STEISEL

Sidney L. Copel, the author, received an EdD from Temple University and since 1956 has been Administrator of the Psychological Clinic, The Devereaux Foundation, Devon, Pennsylvania. He also is Lecturer, Jefferson Medical College Hospital School of Nursing, and Consulting Clinical Psychologist, Psychological Service Center, Chester Public Schools, and in private practice.

The reviewer, Ira M. Steisel, is Chief

Psychologist at St. Christopher's Hospital for Children and Associate Professor in Psychiatry (Child Psychology) at Temple University School of Medicine. His PhD is from the University of Iowa and he has taught at the University of Washington and at the University of Oregon.

for example, he says: "Quite characteristic of this group are (sic) a heightened degree of suggestibility and autosuggestibility" (p. 73). Witnessing sexual intercourse between parents "... is frequently found as an important etiological factor in anxiety hysteria" (p. 76).

would find so deep and un- immersion in psychoanalytic term- by more than they can manage.

DESPITE its slimness this volume may be considered as two books. In the first fifty pages Copel takes the beginning clinician gently by the hand through some of the intricacies of testing children and adolescents, and the writing and organizing of reports, and gives some pointers to those emerging from an 'academic' background to a 'clinical' setting. Roughly the last two-thirds of the text is devoted to an explication of a variety of entities that will be encountered in clinical work with children and adolescents.

There are a number of 'procedural' points in the first portion that are bound to be helpful to the novice. The author's recommendation to consider who will be reading the end product of the clinician's labors, the emphasis on observation of the child and drawing inferences from this as well as the test data; the concern for style; the suggestion that testing of the 'untestable' may be deferred or foregone without this being thought of as capitulation, the recommendation that the clinician try to be anxiety-reducing rather than anxiety-stimulating, etc. are all sound and commendable. One can almost overlook some of the points that seem trivial or may be uniquely relevant to the setting in which Copel has functioned.

When one reads the presentation in the latter portion of the text, then disappointment mounts. This section the author no doubt considers the *raison d'être* of the book. He is committed to the psychoanalytic viewpoint, but this is not necessarily deplorable in the eyes of this beholder. Yet some of the statements sound as though they were uncritically excerpted from a vintage edition of Freud. Assertions are rather boldly made even though there may be other evidence that is at variance with such a position, or there is no evidence at all. In discussing anxiety hysteria,

THE author's discussion of clinical entities further suffers from a curious kind of limitation in a book on psychodiagnosis. The psychologist is typically asked to utilize data above-and-beyond that found in the case history materials and his interview, namely, what he finds via tests. Although Copel does speak of the distinguishing characteristics that the various entities show, what is absent—and this would appear to be what the beginner needs and wants—is how these will be shown in the test findings he has labored to gather and score. For most of the case materials in the book there are no test data presented and the diagnostic conclusions are made without reference to them.

Perhaps the most disappointing aspect of the book is that by-and-large the clinical entities are described without the perspective of the relationship to a developing organism. Students in child settings tend to come from a background of work with adults and must learn when a conclusion that may be valid for an adult is not applicable or must be tempered when dealing with a child and that behavior that is deviant in an adult not only may be commonly found in children but also may be a normal part of the developmental process. Simply and perhaps grotesquely put, a student need learn there is less pathology demonstrated when a four-year-old talks of seeing things in his bedroom at night than when an adult does. Unfortunately Copel does not keep the student from falling into the trap of conceiving of the child as an homunculus.

The inclusion of a chapter on self-destructive behavior (which is relatively rare) and the omission of one on character disorders (which is most common) are quite puzzling. Also the book would be enhanced if there were a glossary and reference for the first part of the book. My impression is that many students

On Course—Or Drift?

Dorothy S. Rosenbaum and Conrad F. Toepfer, Jr.

Curriculum Planning in the School Psychology: The Indicated Approach. Buffalo: Hertilon Press, 1966. Pp. 141.

Reviewed by BEEMAN N. PHILLIPS

The first author, Dorothy S. Rosenbaum, received her M.A. in education from Syracuse University and her PhD in 1964 from the State University of New York at Buffalo. She has been working in school psychology since 1958 and since receiving her EdD has worked nearly full-time in the Niagara Central School. In addition, she is Educational Director of the Wyndham Haven Home for Children in Lockport, N.Y. The second author, Conrad F. Toepfer, Jr., received his EdD from the State University of New York at Buffalo in 1961 and holds the position there of Assistant Professor of Education in the Department of Curriculum Development and Instructional Media. He is the author of many articles on curriculum development.

The reviewer, Beeman N. Phillips, is Professor of Educational Psychology, The University of Texas at Austin. He received his EdD from Indiana University and his special areas of interest include child development, school psychology, and psycho-educational research. He has reviewed recently for CP.

SCHOOL PSYCHOLOGY faces an "identity crisis." Its traditional moorings to clinical psychology have been loosened, and it is drifting out into psychological cross-currents. At the same time

it is casting about and seeking new moorings.

As a result, various conceptions of school psychology are emerging, and there are strong advocates of each. In addition to the "school clinician," there are at present other models indicated by the following titles—"Child learning specialist," "social psychologist in education," "psychologist-problem solver in education," "research school psychologist," and "mental health consultant in the schools."

This book develops a theme, which is that psychological and instructional services need to be closely coordinated in schools, and it describes the experiences of a curriculum supervisor and a school psychologist. Also, it is an exemplar of interprofessional collaboration, and in this sense reinforces the work of the Interprofessional Research Commission on Pupil Personnel Services and other groups.

The authors, who are the supervisor and psychologist, design and implement this "coordinated approach" in a school system with approximately 3,000 students. They jointly plan and carry out classroom visitations, teacher group therapy, review workshops (for teachers), unit planning, and consulting teacher services (e.g., the psychologist teaches special topics for teachers).

THE detailed account of these activities in the first two-thirds of the book has the effect of operationalizing a particular view of the school psychologist's role-functions. The authors offer personalistic evidence that a curriculum supervisor and a school psychologist can work together in curriculum planning and decisions. For those who are pessimistic about the possibilities of meaningful involvement of the school psychologist in this sensitive area, these sections should provide a basis for a reconsideration of this view, and will introduce a note of optimism.

The remaining one-third of the book deals with the rationale and requirements of "the coordinated approach." In addition, implications for the education of curriculum supervisors, school psychologists, and classroom teachers—as well as other matters—are discussed.

Finally, "the coordinated approach" unwittingly reflects the institutionalized structural and organizational character of the operation of schools. Specifically, an aura of "enlightened paternalism" pervades the pages of this book. Nowhere is there clear and convincing evidence that classroom teachers in this system have a substantial equity in the planning and decisions that directly affect them (e.g., the workshops are planned for them).

This brings into focus one of the major dilemmas of the school psychologist: how does he become a more integral part of the system while at the same time staying apart from it? While "the coordinated approach" exemplifies a way to enhance the centrality of the psychologist's educative efforts, it may well lead to a "Pyrrhic victory" since the cost may be the loss of the apartness so necessary in the full utilization of the special skills of the psychologist.

The Dimensions of Sensation—1968

Mathew Alpern, Merle Lawrence, and David Wolsk

Sensory Processes. Belmont, Calif.:

Brooks/Cole, 1967. Pp. vii + 151.
\$1.75, text; \$2.25, trade.

Reviewed by JOHN K. BARE

All three authors are at the University of Michigan. Alpern holds joint appointments in the School of Medicine as Professor of Physiological Optics and as Professor of Psychology in the College of Literature, Science, and The Arts. Lawrence is Director, Kresge Hearing Research Institute, Professor of Otolaryngology, Professor of Physiology in the Medical School, Professor of Psychology and Research Associate in the Institute of Industrial Health. The third author, David Wolsk, is on leave

of absence doing research at the University Neurophysiology Institute in Copenhagen. He has also taught at the University of Gothenburg.

The reviewer, John K. Bare, is Professor of Psychology and Chairman of the Department at Carleton College. He teaches a course in sensory processes and one in physiological psychology.

THE INTRODUCTION to this little volume, one of several designed for the cafeteria selection of topics for the elementary course, elegantly reflects what is to come. Sensory psychology is seen as venerated and experimental, posing "crisper" questions and gaining "more insightful" answers "than is yet possible in other branches of psychology"; physical and chemical events at the cellular level are to be discussed and related to human sensations; and the style produces too many orienting reflexes.

If you want recent and very significant data available in a single source and you have little need for precision of presentation, choose this book. If the reverse is true, C. G. Mueller's *Sensory Psychology* will be more satisfactory.

The task of editing appears early. On page 4 of the introductory chapter, Wolsk says: "A stimulus is defined in the following terms: 1) the qualitative dimension . . . 2) the quantitative or intensive dimension . . . 3) the temporal dimension . . . and 4) a spatial dimension . . ." (*Italics his*). Boring's *Physical Dimensions of Consciousness* does not appear in the references for this chapter or any other.

In the chapter on vision, Alpern gives the most extensive treatment to color vision, including the work of Rushton, Brown and Wald, Marks, Dobelle and MacNichol, and DeValois, but the reader may have to intuit precisely what the Trichromatic Nature of Color Vision is, and he may stumble over sentences: "For a long time it was felt that the chemistry of iodopsin and rhodopsin had nothing at all to do with color vision in man." "Red cones inhibit only red cones. . ."

Lawrence devotes his chapter on hearing largely to the problem of pitch perception, where the description of von Békésy's work on the pattern of vibra-

tion of the basilar membrane receives almost too extensive a treatment, particularly when his concept of *funneling* is referred to in a sentence in a paragraph that says too little about the combination of the frequency and place theories that most researchers seem to support, and nothing about the response areas recorded by Galambos and Davis, and Tasaki at the various synaptic relay stations in the auditory system. The cochlear microphonic is called the Wever-Bray effect.

In the chapter on the Chemical Senses by Wolsk the central problem continues to be the qualitative dimension of these sensations. The current state of the evidence leads Wolsk to turn to the role of chemical stimuli in the mating behavior of moths and the self-selection of diets by rats.

Wolsk, in the last chapter (Bodily Orientation, Touch and Kinaesthesia, and Visceral Sensation, all in 21 pages) simply attempts too much.

But other writers of elementary textbooks would do well to imitate the discriminating selection of recent findings these authors include, and remind themselves that psychophysiology has already celebrated the silver anniversary of the development of the microelectrode.

Mind The Body

Alexander Lowen

The Betrayal of the Body. New York: Macmillan, 1967. Pp. 307. \$6.95.

Reviewed by ALLAN H. FRANKLE

The author, Alexander Lowen, is a practicing psychiatrist and executive director of the Institute for Bio-energetic Analysis in New York City. He was a co-worker of Wilhelm Reich, to whose character analytic method he has added

significant original insights and clarifications. Two of his earlier books have been reviewed in Contemporary Psychology: Physical Dynamics of Character Structure (CP: 1959) and Love and Orgasm (CP: 1966).

The reviewer, Allan Frankle, received his doctorate in clinical psychology at the University of Chicago, and is primarily engaged in the practice of psychotherapy in Des Moines. In 1967 he joined the faculty of Drake University, where he is Adjunct Professor of Educational Psychology in the College of Education. He is involved in research on social intelligence and empathic sensitivity, particularly as it affects the ability to do effective social case work. In 1967 he reviewed Gregory Rochlin's Grievances and Discontents for CP.

IN perusing this book I was reminded of the aphorism, "Man does not live by bread alone." This evoked from some wag the rejoinder, "But without bread he does not live at all." Lowen's book stands as a reminder to psychologists and psychiatrists that people are not disembodied egos, and that without solid experiential contact with their bodies they merely exist rather than really live. Psychotherapists do not deny the importance of the body, but many succeed in ignoring it and most of the rest are pretty fuzzy as to how it is related to the mental health of their patients.

The author, without attempting a formal philosophical analysis of the mind-body problem that has perplexed psychologists and philosophers for centuries, offers a rich array of clinical observations and some provocative interpretations bearing on the interrelationship of psyche and soma. He asserts that healthy body functioning—requiring a full acceptance of the body's needs, feelings and appearance, and the internal freedom to enjoy bodily pleasures—is basic to genuine emotional health and maturity.

The author's theory seems to be a lineal descendant of Freud's via the biopsychological concepts and methods originated by the late Wilhelm Reich, a highly creative but controversial figure in the evolution of psychiatry. It would be unfortunate if the contro-

versies about Reich were to deter the reading of Lowen's book. The author has not only described his concepts and procedures lucidly but tied his clinical observations and theories together with a diverse body of research by other workers in the field of psychology.

THOSE unfamiliar with his work or with Lowen's other books will find that reading Lowen is not merely reading another book, for it induces the reader to a whole "self-educational thought." Hence, some background material is briefly reviewed. Reich was originally a student of Freud, developed the concept that the body's posture, mobility, distribution of muscular mass, circulation, energy, facial expression, gestures, and voice are all intimately linked with the person's character structure. He demonstrated that the physical patterns express or serve as a threshold in various ways the basic attitudes or feelings of the individual. One's defenses are not merely "armor" but operate directly in the "breathing, and other somatic functions. This tight linkage works reciprocally—somatic and psychosomatically—and permits (in fact requires) significant intervention via analysis, activation, or release of body energy in parallel with the orthodox pursuit of verbal productions. Lowen has over the years extended and modified Reich's concepts to character analysis. In this book he describes and interprets the physical manifestations of emotional problems as well as his insightful and ingenious therapeutic approach that aims at a more unified relationship of psyche and soma. No reference is made to Reich's original "orgone" energy concept. Has Lowen abandoned this because of finding it invalid, or out of prudence following Reich's prosecution by the FDA?

THERE is some question, however, as to whether this book is useful reading for even well-educated laymen. Judging from the jacket "blurb," the publisher apparently regards it as falling within the bibliotherapy category, and is promoting it for the general public

to read. For some laymen it may be reassuring and encouraging; but some of the content, if taken literally, could confuse or disturb others considerably, especially if they had no opportunity to obtain personal clarification or to ventilate their feelings. Unfortunately the same could probably be said about many other books that are less sound or significant, so that the point should not be overstressed.

The book presents many ideas and demands critical thought in order to gain its full value. The genesis and the dynamics, physical and psychic, of the schizoid personality are explored in depth, a feature of special interest in view of the apparently increasing prevalence of this syndrome. Lowen's style is direct, personal, vigorous, at times poetic in its apt use of metaphors and similes. Occasional assertions are rather sweeping or dogmatic, and best taken with several grains of salt. In spite of some tendency to oscillate between complex technical formulations and somewhat oversimplified case presentations, the book communicates successfully at both the knowledge level and the feeling level. The author's ability to write with "heart" as well as mind is particularly appropriate to the content.

The Betrayal of the Body, although a quasi-popular book, still has ample substance of value to a professional therapist. On a broader scale, taking the aggregate works of Reich and Lowen as a related sequence, and recognizing the speculative and controversial aspects of some of their ideas, it seems to this reviewer that their contributions significantly advance the understanding and therapy of emotional disturbance. In a field suffering from a plethora of banal and repetitious publication, these authors have much to say that is both original and thought-provoking. Just how valid and powerful their specific hypotheses and techniques really are can be ultimately determined only by a combination of clinical and laboratory research in which psychologists ought to participate.

Teacher Watching

Philip W. Jackson

Life in Classrooms. New York: Holt, Rinehart & Winston, 1968. Pp. xi + 177. \$3.95.

Reviewed by LOUIS M. SMITH

The author, Philip W. Jackson, is Professor of Education, University of Chicago, where he has been since his 1955 PhD from Teachers College. He spent the year 1962-63 at the Center for Advanced Study in the Behavioral Sciences. He is principal of the nursery school at the University of Chicago and in such guise spends a good deal of time, according to him, "teacher watching." He is author with Getzels of Creativity and Intelligence.

The reviewer, Louis M. Smith, is Project Director of the Central Midwestern Regional Educational Laboratory, on leave from Washington University where he is Professor of Education and Psychology in the Graduate Institute of Education. His PhD is from the University of Minnesota. His research in recent years has focused on the observation of ongoing educational settings. He is author of The Complexities of an Urban Classroom and the forthcoming The Anatomy of Educational Innovation.

"In order to have had as much time in church as a sixth grader has had in classrooms we would have to spend all day at a religious gathering every Sunday for more than 24 years. Or, if we prefer our devotion in smaller doses, we would have to attend a one-hour service every Sunday for 150 years before the inside of a church became as familiar to us as the inside of a school is to a twelve-year-old (p. 5)."

SUCH is the flavor of *Life in Classrooms*. Many readily available facts about schooling sparkle, come alive, as Jackson provides a context and an interpretation. The book is beautifully written, urbane and witty, and a pleasure to read. How he was able to convince his editor that an index, a bibliography, and a few chapter subheadings were not needed remains a mystery and constitutes the major negative reactions of this reviewer.

The basic message of the book demands—and that is the reviewer's verb, for Jackson is more soft-spoken—that educational psychology examine itself as it has not done since E. L. Thorndike shaped the field and stamped its basic pattern into a substantive consideration of measurement, learning, growth and development, individual differences, and a methodological embrace of the new scientific approach. According to Jackson, the hopes of psychologists and teachers alike that a scientific theory of learning would speak to problems of importance to the classroom teacher have not been realized. Secondly, the current concern with educational engineering, the careful statements of behavioral objectives and related measures of progress, "begins with an oversimplified image of what goes on in elementary school classrooms." Jackson reminds us that a typical elementary teacher may teach 25-30 students, for 1,000 hours a year, in four or five

curricular areas, and under such conditions precision seems a bit unreasonable. Finally, he argues that the clinical psychologist's stance does not capture the teacher's life in the classroom for the clinician tends to attribute the causes of the child's behavior to family background or to the child's personality. In contrast, the teacher comes to find himself as the central causal agent in the child's action. "If he tells his students to take out their spelling books, the spelling books appear, if he asks a question, hands go up, if he calls for silence he usually gets it." With learning theory gone, with behavioral objectives and their measures discounted, and with clinical knowledge and orientation minimized, the psychologist must ponder if he knows anything relevant to the task of teaching.

THE seeds of the revolution in educational psychology that Jackson is sowing are both methodological and substantive. He contends that psychologists need to spend more time observing teaching and schooling and talking with teachers and other school personnel. Many educational psychologists will question whether these are methodological advances; however, it is essentially through these methods that Jackson has developed the position described in the previous paragraph. As he observes and listens, he finds that children are "surrounded by a stable and highly stylized environment." The potency of such a setting is immense and is often overlooked. Psychologists need to know more about the significance of life in a crowded place, and classrooms are this way, for some unknown expert has decreed that 900 square feet, 30 X 30, is just right for 30 elementary children. The game of going to school has more written and unwritten rules—"no loud talking during seatwork, do not interrupt someone else during discussion, keep your eyes on your own paper during tests . . ."—than do the grammarian's textbooks or the baseball players' rule books. Classrooms are situations where most children develop their first "semi-public record of progress," and where they live many hours with "unequal power." Despite years of

learner centeredness, fads regarding report card changes, and attempts at non-gradedness, the institutional aspects of school life remain with us, yet somehow they have not been the province of the psychologist, even though these institutional aspects may have much to say about the behavior and experience of children.

If these institutional and organizational variables are important aspects of the environment, they should relate to aspects of child behavior and experience. A probing clinical consideration of a variety of data produces a number of questions regarding pupil attitudes toward school, attentiveness in class, and thought processes during lessons and recitations. Jackson concludes that the bulk of students have mild and ambivalent attitudes toward school, that teachers are not clearly aware of individual pupil attitudes, and that attitudes are not predictive of academic success. To the reviewer, this is reminiscent of the literature on vocational interests and the morale and productivity literature in industry. More sophisticated social system and personality models are necessary for interpreting such 'simple' data. The causal chains of teacher behavior and classroom ritual influencing pupil attention and involvement, the relation of these to covert pupil thinking, and ultimately the relation of in-class thought processes to pupil achievement are just beginning to be analyzed. Jackson threads his way through much of the preliminary and tentative documentation of this literature.

In Chapter Four, Jackson reports on his talking with and listening to a group of elementary teachers. The chapter is strong because the author is at his perceptive clinical best; it is weak because he talked only with teachers who were judged by someone, usually principals, to be "outstanding," and we do not yet know enough about principals' schemas. Jackson obviously is aware of all this, but it would seem provocative, especially in the light of Medley's and Mitzel's data, to have the principals' ne'er-dowells talk about classroom life also. Nonetheless, he found these teachers

dealt with the here and now, the short term, the visible, and the tangible. As they taught, they were alert behaviorists, alert to indicate interest, boredom, and participation. The students' enthusiasm and interest seem much more important than their performance on tests. The reader is back into Jackson's concerns (and chapters) and the basic thesis of the book itself, an exploration of psychological variables that are meaningful and important to teachers. Discussion of Peterson's conception of age and career variables on teacher schemas would have fitted nicely with the institutional roles raised earlier in the discussion.

In short, those educational psychologists who have been arguing for greater attention to a psychology of teaching—and the reviewer has no bias—will find an eloquent and supportive position paper in *Life in Classrooms*. Those who have been resistant to change in focus will have difficulty ignoring it.

Three Classrooms in a Pottery

Kurt Salzinger and Suzanne Salzinger (Eds.)

Research in Verbal Behavior and Some Neurophysiological Implications. New York: Academic Press, 1967. Pp. xvii + 510. \$11.00.

Reviewed by DAVID S. PALERMO

The editors are husband and wife. Kurt Salzinger received a 1954 PhD from Columbia and is at present Associate Research Scientist in the Biometrics Research Unit, New York State Department of Mental Hygiene, and is also affiliated with the Polytechnic Institute of Brooklyn. He heads the Biometrics

Research Laboratory of Verbal Behavior. Suzanne Salzinger collaborates with her husband on his research in verbal behavior and is also connected with the Biometrics Research Unit.

The reviewer, David S. Palermo, has a PhD in child psychology from the University of Iowa and has taught at Southern Illinois University and at the University of Minnesota. Currently he is Professor of Psychology at The Pennsylvania State University. He has an NIMH Career Development Award and is co-author of Research Readings in Child Psychology (with Lipsitt) and Word Association Norms: Grade School through College (with Jenkins). His research has focused on the influence of natural language associations on the verbal behavior of children.

DESIROUS of having a conference centering about the effects of drugs on verbal behavior and finding a paucity of relevant data, the Salzingers conceived and brought to fruition a conference covering the "entire" field of verbal behavior, with a neurological twist to make it unique. This volume is the tangible product. Twenty-eight papers were duly written, presented, discussed, and compressed between two hard covers. The presentations range from a six-page account of "The Neural Basis of Language" through a lengthy consideration of "The Problem of Response Class in Verbal Behavior." It was not an exciting excursion into the marketplace of verbal behavior for this shopper who has recently found a renewed appetite for the delicacies of the psycholinguistics shop. It was not exciting because it seemed that a great deal of once fresh and appealing but now withered fruit was being displayed as prized produce.

Grosslight discusses the complexities of the verbal behavior of the mynah bird whom he once thought would aid in the understanding of child language acquisition. Lilly is more optimistic about the dolphin. Salzinger defines and re-defines response classes of verbal behavior and challenges the neurophysiologist to explain them. Krasner struggles valiantly to point out that the issue of awareness in verbal conditioning is not dead. Lambert takes less space to argue

that verbal or semantic satiation is still a live issue and Fillenbaum may prove him right by providing an interesting new orientation to the problem using semantic theory borrowed from linguistics. Several contributors note that the verbal behavior of schizophrenics is different from that of normals. It differs in rate, content, predictability, length of utterance, etc. Waskow, in a review of the literature, makes it clear that the original planners of the conference were perfectly correct: research concerned with the effects of drugs on verbal behavior is meager and lacking in methodological sophistication. DiMascio, however, presents some experiments showing the effects of drugs on verbal learning which demonstrate that sound and interesting research can be done in the area.

Some interesting data are presented by Lane exemplifying the polarity principle in behavior; Lambert and Preston on the language interference suffered by bilinguals when given the Stroop test with both languages used; Howes on the changes in the parameters of Zipf's law and Marbe's law for different aphasic groups; Goldman-Eisler on speech pauses and cognitive activity; and Jaffe, Feldstein and Cassotta on pausing in speaker switching. A particularly interesting paper is presented by Luria reviewing the research on the normal and abnormal development of the regulative function of speech in children and relating that to much newer research on the relation between neurological trauma and regulative functions of speech. Chase provides an excellent, integrative final chapter.

THE HIGHLIGHT of the book, however, comes in a sudden burst of three successive, unrelated papers in the middle of the book by Glanzer, Clifton, and Pollack. Glanzer provides a trenchant essay on the efforts of researchers interested in rote learning to push language out of the serial and paired-associate tasks, and the subject's stronger efforts to impose phonological, morphological, and syntactic order on the materials used in the rote task. The result, as Glanzer views it, has been a subject using large response units and an experi-

menter analyzing small units leading to primitive theories incapable of accounting for the behavior observed.

Clifton presents a scholarly analysis of word association data within the framework of the mediation hypothesis and then within the framework of the generative, feature-matching hypotheses. While the latter theoretical structure does not do a complete job of handling the data, it is pronounced the victor in a cleanly fought battle in which the strengths and weaknesses of both are clearly presented.

Pollack discusses the wonders of the human information processing capacities as exemplified in the relatively simple word identification problem. His presentation of the complexities of this human task as a function of stimulus information, response information, structural context and "intention" give a quick appreciation of the marvelous capabilities of the "black box."

As in any collection of papers resulting from a conference, there is heterogeneity in the value and interest generated by the contributions. Those papers identified as strong additions will vary with the reader. The balance for this book and this reader is tipped to the weak side

Just as Kohler uses the language of musical dynamics to express psychological phenomena, on the basis of their formal analogy, so D'Uding makes movement the prototype of vital forms and thus reduces all the arts to 'a kind of dance' (this analogy with life-functions, both lower and higher, was made long ago by Havelock Ellis in The Dance of Life).

—SUSANNE K. LANGER

Eugenics Turns to Social Science

J. E. Meade and A. S. Parkes (Eds.)

Genetic and Environmental Factors in Human Ability. New York: Plenum Press, 1966. Pp. xi + 242. \$12.50.

Reviewed by STEVEN G. VANDENBERG

The editors are identified by the reviewer, Steven G. Vandenberg, who is Professor of Psychology, University of Colorado, Professor of Clinical Psychology, University of Colorado Medical School, and Research Associate, Institute of Behavior Genetics, University of Colorado. He received a law degree from Groningen University in the Netherlands, and a PhD in clinical psychology from the University of Michigan. From 1957-60 he was Associate Director of the Schizophrenia and Psychopharmacology Study, Mental Health Research Institute, University of Michigan. From 1960 to 1967 he was Director of the Louisville Twin Study, Department of Pediatrics, University of Louisville Medical School.

IT is becoming trite to say that there is a resurgence of interest and of research in the role of heredity in human behavior. Nonetheless there is, and this book helps to swell the trend. It contains the papers presented at the second of what is to be an annual symposium of the British Eugenics Society. The editors are Meade, Professor of Political Economy and Parkes, Professor of the Physiology of Reproduction. Both are Fellows of Christ's College, Cambridge. They had to face the usual problem of symposium organizers. Should they aim primarily at the audience attending the symposium, or should they worry more about the readers of the published volume, hopefully

amounting to many times the number in the audience?

The first course of action would require a more tutorial approach since the number of informed listeners would be small; the latter choice would require new information or a novel interpretation in the lectures if the accusation is to be avoided of producing another "non-book." Because of the considerable prestige of the sponsors and their familiarity with relevant research, the editors were able to strike a happy medium, resulting from the ability of most speakers to consider the needs of both listeners and readers. The result is an interesting set of papers that represent rather well the changed nature of eugenics in which "equal time" is given to environment (pre- and post-natal) and to the genes. But perhaps even more interesting to the non-specialist readers is the opportunity to observe the remarkable similarity in the nature of the research done, and of the social concerns expressed, between the United Kingdom and the United States.

Some papers deal with the consequences of selective education both at the secondary and university level. In England the movement for democratization of secondary education has not led to the abolishing of such "public schools" as Eton and Winchester, but to attempts to reduce the distinction in the social origins between pupils attending these private schools and those in the publicly financed grammar schools

or secondary modern schools. Because selection for higher education uses tests, P. E. Vernon of the University of London, started the symposium by summarizing his view of the middle-of-the-road position that seems close to the American one: (a) intelligence is not fixed at birth but depends on learning in home and school, therefore (b) there is no real distinction between achievement and intelligence tests, and (c) there are a number of distinct abilities but differential prediction of success in different academic subjects or jobs has not been too successful, and specific abilities are no more "real" than g even though less protean in nature. Assessing an individual's genotype, therefore, hereditary IQ is impossible. Only phenotypic IQ, which is codetermined by experience, can be estimated.

Other topics discussed in this section are the influence of language on behavior and the demand which she takes the child's remaining on its ability (Bernstein and others); the negative influence of alienation on students not placed in upper streams (Hilda Himmelweit and Douglas Pidgeon); the subjective nature of selection for the university and the unfortunate tendency to use university admission as the criterion of what is worth in all high school classes (Floud and James Drever).

The similarity to what is expressed in the United States is more remarkable in two more papers in this section. The first is by Stephen Wiseman who finds, as did the Coleman Report, that, in a random stratified sample of students of 44 schools, home and neighborhood predicted test results better than school variables did. The other is by Liam Hudson, in which the possibility is raised that university selection encourages conformity and unduly emphasizes high grades in all courses. He reports that Fellows of the Royal Society, Cabinet Ministers, and High Court Judges did not differ, while at the university, from students less successful in later life, as was found in the U. S. A. by MacKinnon.

AFTER these papers explore post-natal environmental factors in ability, the dis-

... moves to "earlier" factors, i.e., hereditary and genetic. James Walker reviews pre-natal and peri-natal conditions, including accompanying mental retardation (MR). He makes the rather novel suggestion that for a certain child, even an IQ of 120 may be indicative of pre-natal or peri-natal damage. He makes the provocative generalization that investigators of "hereditary" conditions stress obstetric factors while physicians interested in MR tend to notice low birthweight. His plea for more research in obstetrics specifies what type of research echoes similar statements in the U.S. as does his assertion that further research in peri-natal conditions and prenatal care will be expensive. His chapter is a useful summary of the unrelated factors that can affect a child, and explains why obstetricians and pediatricians require broad training in general medicine.

Kushlick points out that assessment of the incidence of MR is complicated by the lack of uniform psychometric, medical, and educational criteria. Reported incidence of retardation declines with increasing age, suggesting that such children are often "discovered" in school, though the use of technology may leave some opportunities for employment in the future. In addition, less than the expected two percent of the normal population are found in special education or are so classified by medical criteria. Is the expectation too high because the distribution is not Gaussian or because a sizeable number of retarded are not recognized and properly (?) treated? He believes that better obstetrics and general health services have lowered the incidence of MR in recent years. Since the incidence of mild retardation is higher in the lower classes where medical care is poorer, the possibility of still further reduction is considerable. He regrets the reluctance of child guidance clinics to play a role in the MR field, necessitating duplication of certain services. Finally, he advocates much smaller institutions. In Wessex County a trial is made of an institution for only 25 mentally retarded.

C. E. Dent of the University of London, describes some biochemical aspects of MR, contrasting storage dis-

eases (in which a toxic substance accumulates in some tissue which it then damages) to diseases in which the toxic substance is released in the bloodstream, such as PKU. Such diseases can be detected earlier and serious damage prevented, while during pregnancy the mother's placenta removes the toxic substance, so that the children are generally not in serious trouble at birth.

VALERIE COWIE of the MRC Psychiatric Genetics Research Unit, Maudsley Hospital, sketches some broad aspects of chromosomal defects in MR: anomalies of sex chromosomes seem to affect primarily the genital tract whereas autosomal anomalies seem to affect all tissues, including the brain. It seems that too little genetic material is as damaging as too much. Areas that seem to be specially vulnerable are orbits and periorbital structures, the nasal bridge, mouth and palate, ear pinnae, the lower jaw, the neck, hands and feet, viscera (notably the heart), and the brain (corpus callosum). This may provide clues about the timing of the disorder in the growing embryo.

Chapters by Carter and Falconer discuss differential fertility of IQ groups while a chapter by Benjamin concerns social and economic differentials in fertility. Finally, Huntley reports on a rather conventional twin study of intelligence as measured by a composite Vocabulary Test.

All in all this volume is about as good as any published symposium can be. It reflects accurately the present status of knowledge about factors influencing intelligence. As in most symposia reports, there are few completely new facts or theories reported. No attempt is made to face the difficult task of establishing the proportional share of postnatal, pre-natal, and hereditary factors, so that equitable allocation of funds can be based on the potential improvement in the over-all IQ distribution that can be expected from further investments in research and improved service. Perhaps a future symposium could address itself to that challenging job.

Potpourri by Committee

Joseph F. Perez, Richard C. Sprinthall, George S. Grosser, and Paul J. Anastasiou (Eds.)

General Psychology: Selected Readings. Princeton, N. J.: Van Nostrand, 1967. 1st ed. ix + 421.

Reviewed by NEIL A. CARRUTHER

The first editor, Joseph F. Perez, is Professor and Chairman of the Department at State College, Westfield, Massachusetts. Richard C. Sprinthall is Associate Professor and Chairman of the Psychology Department at American International College, Springfield, Massachusetts. Grosser is also at American International College, as Associate Professor. Anastasiou is Instructor in Psychology at Tulane University.

The reviewer, Neil A. Carruther, received his PhD in 1956 from the University of Michigan where he served as teaching fellow and predoctoral instructor under William J. McKenchie. He is in charge of the introductory course and supervises the undergraduate curriculum in psychology at Southern Illinois University where he is Associate Professor. He is author of *Evaluating the Introductory Psychology Course, 1966* and *Evaluating the Introductory Psychology Course: Additional Test Items, 1967*, both designed to accompany the McKenchie and Doyle text, *Psychology*.

SHOULD you adopt a book of "readings" as an introductory textbook for your course? Here is a collection of articles by a quartet of editors who hope you answer in the affirmative. They offer the usual motive for yet another such volume: "the real problem of attempting to acquaint . . . students with the original sources in the literature of psychology." In general, their selections are well-chosen, sensibly edited, and worth serious consideration.

The editors have collected their 64 selections in eleven chapters whose titles correspond to those in most introduc-

tory textbooks. Thirty-three of the selections are from professional journals, 29 are from books, one is from a popular magazine, and one is a specially prepared glossary of measurement terms. With few exceptions the emphasis is upon human rather than infra-human psychology. However, the omission of certain topics usually found in such volumes is notable. No selections are presented on cognitive or language processes, nor are the behavioral disorders more than tangentially presented.

Each chapter begins with two or three pages by the editors giving an introduction to the chapter topic, followed by short overviews to alert the student to the intent, problems, and significance of each selection. The editors' contributions are brief, but do provide helpful orienting cues written in an easy, almost conversational, style.

Since approximately sixty percent of the selections were originally published before 1960, the editors obviously did not make a fetish of contemporaneity. Rather, four general objectives guided the selection of readings. First, the views of major theorists should be presented, and in their own words. Thus, samples by such writers as G. Allport, Freud, Skinner, Tolman, and Watson are offered. Although only one page in length, the doctrine espoused by Watson still rings with provocative audacity from its distance of 55 years. Second, the editors included a number of what they term "break-through" experiments of recent vintage: e. g., Olds's work on brain self-stimulation, and the Hess and Polk pupillometric research. Third, the editors have taken pains to illustrate their conviction that "controversy is still the 'name of the game' in psychology." Hence, Milgram's work on the "liberating" results of group pressure is juxtaposed against the constraining effects implied in selections from Riesman, Sherif, and Newcomb. Allport is presented contending the inapplicability of Freud's theories to normal people, while McClelland challenges the utility of Allport's functional autonomy concept. Finally, a concern for readability motivated the editors' efforts. In matching the technical level of the selections to the average introductory course student they have succeeded very well.

Where data are presented they are usually in the form of bar graphs, line graphs, or comprehensible tables in which the most esoteric statistic employed is an occasional *t* test with appropriate *P* values. With no criticism implied, one can say that this collection is obviously not designed for highly selected groups of the academically talented. The majority of students would appear to constitute the intended market.

In short, here is a well-edited, well-chosen, generally interesting, occasionally provocative, and readable supplement for the average introductory course. A manual of 425 test items is available if you adopt it.

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